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BOOK PLATE FROM "THE COMET"
West Division High School, Milwaukee

WESTERN
DRAWING AND MANUAL TRAINING
ASSOCIATION

PROCEEDINGS
OF MEETING HELD AT
MILWAUKEE, WISCONSIN
MAY 6-9, 1914

TWENTY-FIRST
ANNUAL REPORT

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Officers and Standing Committees

1915

OFFICERS

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Indianapolis, Ind.

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Milwaukee, Wis.

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Milwaukee, Wis.

Treasurer, L. W. WAHLSTROM,
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Auditor, VANDERLAINE HENKEL,
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Lucy Silke, Chicago, Ill.; Carl N. Werntz, Chicago, Ill.; Fred D. Crawshaw, Madison, Wis.; Emma M. Church, Chicago, Ill.; Robert W. Selvidge, Nashville, Tenn.; *Ex-officio*, President and Secretary.

STANDING COMMITTEES

PROGRAM COMMITTEE: Harry E. Wood, Indianapolis, Ind.; George W. Eggers, Chicago, Ill.; *Ex-officio*, President and Vice-President.

EXHIBIT COMMITTEE: Lydia D. Pohl, Chicago, Ill.; Edward F. Worst, Chicago, Ill.; Emily M. Dorn, Milwaukee, Wis.; Alexander Mueller, Milwaukee, Wis.

EDITORIAL BOARD: M. Emma Roberts, Minneapolis, Minn.; S. J. Vaughn, DeKalb, Ill.; Arthur F. Payne, Peoria, Ill.

Twenty-First Annual Meeting

MILWAUKEE, WISCONSIN, MAY 6, 7, 8, 9, 1914

OFFICERS

- President*, ROBERT W. SELVIDGE,
Peabody College, Nashville, Tenn.
- Vice-President*, REGINA TEIGEN,
Public Schools, Sioux Falls, So. Dak.
- Secretary*, WILSON H. HENDERSON,
Public Schools, Hammond, Ind.
- Treasurer*, L. R. ABBOTT,
Public Schools, Grand Rapids, Mich.
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Public Schools, Des Moines, Iowa.

COUNCIL

- FLORENCE E. ELLIS, Sandusky, Ohio.
- LUOY SILKE, Public Schools, Chicago.
- CARL N. WERNITZ, Academy of Fine Arts, Chicago.
- FRED D. CRAWSHAW, University of Wisconsin, Madison, Wis.
- EMMA M. CHURCH, Chicago School of Applied and Normal Arts, Chicago.
- President, Ex-officio.*
- Secretary, Ex-officio.*

STANDING COMMITTEES

- PROGRAM COMMITTEE: Ira S. Griffith, University of Missouri, Columbia, Mo.; Ella L. Babcock, Milwaukee, Wis.; *Ex-officio*, President and Vice-President.
- EDITORIAL BOARD: Clinton S. Van Deusen, Kent, Ohio; M. Emma Roberts, Minneapolis, Minn.; S. J. Vaughn, De Kalb, Ill.
- EXHIBIT COMMITTEE: Emily M. Dorn, Milwaukee, Wis.; Alexander Mueller, Milwaukee, Wis.; Frances Keffer, Des Moines, Iowa; Roy C. Woolman, Des Moines, Iowa.

LOCAL COMMITTEES

EXECUTIVE: Emily M. Dorn, Milton C. Potter, Carroll G. Pearse, Frank M. Bruce, Lucy D. Hale, Ella L. Babcock, Caroline E. Eckers, Ora A. Blanchar.

ENTERTAINMENT: Lucy Dorritt Hale, Mr. and Mrs. Carroll G. Pearse, Mr. and Mrs. Milton C. Potter, Mr. and Mrs. Dudley Crafts Watson, Miss Ellen C. Sabin, Mr. and Mrs. A. J. Lindeman, Mrs. Sophie Harris, Mr. and Mrs. G. W. Augustyn, Mr. and Mrs. Samuel A. Connell, Mr. and Mrs. Emmett L. Richardson.

PUBLICITY: Ora A. Blanchard, Louise F. Brand, Winnifred Frye, Samuel Wilde, Charles F. Kahle.

HOTELS AND TRANSPORTATION: Caroline E. Eckers, Georgia Lockhart, Frances Brugger.

EXHIBIT: Emily Dorn, Frank Campbell, Alexander Mueller.

PROGRAM: Ella L. Babcock, Helen Poole, Rhoda Gooch.

FINANCE: Frank M. Bruce, Charles F. Perry, Robert L. Cooley.

PROGRAM

Upon invitation, the Wisconsin School Arts and Home Economics Association meets with the W. D. and M. T. Association. All sessions will be held at Kilbourn Hall-Auditorium, unless otherwise stated.

General Topic. A Casting of Accounts Educationally, of the Fine and Industrial Arts.

WEDNESDAY, MAY 6

Registration. Auditorium-Kilbourn Hall.

2:00-5:00 p. m.—General Session.

Opening Exercises.

Music.

Address of Welcome—

Mayor of Milwaukee.

G. W. Augustyn, President Board of Education.

Milton C. Potter, Superintendent of Schools.

Response and Address of President

R. W. Selvidge.

Business.

Appointment of Committees on Resolutions—Place of Meeting;

Election of Committee on Nominations.

Inspection of Exhibits.

Milwaukee is planning to make the exhibits a special feature of the meeting. Plenty of time should be set aside by the members for their study.

6:00-8:30 p. m.—Dinner—Plankinton Hotel.

8:30-10:30 p. m.—Entertainment—provided by local members—Plankinton Hotel, Colonial Room.

THURSDAY, MAY 7

9:00-10:30—General Session—Kilbourn Hall.

Folk Dancing.

Highland Fling.

Polish Dance.

Spanish Dance.

Aesthetic Waltz.

Address—"Present day Psychological and Educational Aspects of the Fine and Industrial Arts"—Carroll G. Pearse, President Milwaukee State Normal School.

10:30-12:30 p. m.—Round Tables.

Art Round Table—Kilbourn Hall.

Lucy Dorrit Hale, Milwaukee State Normal, Chairman.

Topic—"The Service of Art in the Plan of Education for the Child"—Florence Fitch, Public Schools, Indianapolis.

Topic—The Exhibits—"From the Standpoint of the Child's Environment"—R. W. Himelick, State Normal School, River Falls, Wis.

Discussion—"A general discussion reviewing the exhibits from the standpoint of the Emotional Approach to Art, and from the standpoint of Technique."

Vocational Round Table—Juneau Hall.

Chas. H. Bailey, State Teachers' College, Cedar Falls, Iowa, Chairman.

Topic—"Continuation Schools; Shall they be General Improvement Schools or Vocational Schools?"—Warren E. Hicks, Inspector of Industrial Education, State of Wisconsin, Madison.

Topic—"The Boy and the Printshop,"—S. J. Vaughn, Northern Illinois State Normal School, DeKalb.

Discussion:

3:00-5:30 p. m.—

Special Session of the Wisconsin School Arts and Home Economics Association, Kilbourn Hall.

1. Business Meeting.

2. Address—"The Fine and Industrial Arts in Wisconsin: What Should the Public Schools Do at This Time in Teaching Them?" President L. D. Harvey, Stout Institute, Menomonie, Wis.

2:00-5:00 p. m.—Inspection of Exhibits—Committee Meetings.

5:30-8:00 p. m.—Reunions.

8:15-10:00 p. m.—General Session—Kilbourn Hall.

Music—Public School Pupils.

Address—"General vs. Special Education"—A discussion of the Relationship Between Cultural and Vocational Subjects, H. H. Seerely, President State Teachers College, Cedar Falls, Iowa.

Address—"Revolutions in Art—What the Post-Impressionists and the Cubists are Struggling for"—Dudley Crafts Watson, Director Milwaukee Art Society.

FRIDAY, MAY 8

9:00-10:30 a. m.—General Session—Kilbourn Hall.

Music.

Address—"Design in General Education: An Analysis of its Claims and its Accomplishments"—L. D. Harvey, President Stout Institute, Menomonie, Wis.

10:30-12:30 p. m.—Round Tables.

Household Arts—Kilbourn Hall.

Dorothy Buss, McKinley High School, St. Louis, Chairman.

Topic—"Aims and Methods in Teaching Household Arts."

"In the Grades"—Emma Conley, State Inspector of Domestic Science, Madison, Wis.

"In the High School"—Flora E. Henke, Hackley Manual Training School, Muskegon, Mich.

"In the Trade School"—Ora A. Blanchard, Principal Girls' School for Trades, Milwaukee, Wis.

Discussion—

Manual Training Round Table, Juneau Hall.

Fred Buxton, Stout Institute, Menomonie, Wis., Chairman.

Topic—"How May Manual Training Contribute to Vocational Preparation?" W. H. Henderson, Public Schools, Hammond, Ind.

Topic—"How May Manual Training Retain Its Earlier Educational Values?"—Chas. A. Bennett, Bradley Polytechnic Institute, Peoria, Ill.

Discussion—

Led by F. D. Crawshaw, University of Wisconsin, Madison.

2:00-3:30 p. m.—Automobile Ride.

Automobiles will start from the Auditorium.

3:30-6:00 p. m.—Visits to—

Boys' School of Trades.

Girls' School of Trades.

Milwaukee Art Society.

Milwaukee Downer College.

Layton Art Gallery.

8:00-10:00 p. m.—General Session—Kilbourn Hall.

Folk Dancing, Pupils of Cass Street School.

Address—"Striking the Balance Between Theory and Practice
in the Fine Arts"—E. J. Lake, University of Illinois, Urbana.

Address—"The Place of Practical Activities in Education."
Katherine E. Dopp, University of Chicago.

SATURDAY, MAY 9

9:00-11:00 a. m.—General Session—Juneau Hall.

Music.

General Business Meeting.

The music will be by pupils of the public schools, under the direction of the Supervisor of Music, Miss Helen Poole.

The Folk Dancing is under the direction of Miss Rhoda Gooch.

ADDRESS OF WELCOME

By G. W. AUGUSTYN

PRESIDENT STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA.

Mr. Chairman, Ladies and Gentlemen: I am certainly glad to be with you for a few moments this afternoon and to speak to you as one who sees your problems and perplexities through the eye of the School Board rather than the school room. It is to me at once a pleasure and an inspiration to be gathered with those who represent that general organization in this country, the directing force for the lives and thoughts of the youth of America, the public schools.

Our slogan has always been, I believe, to train for citizenship. Year after year, thousands and thousands of our young men and women come from our schools and go out to begin the real battle for bread; and I sometimes wonder, after all we have done, after the tremendous amount of money that has been spent by the Government, states and municipalities—why we apparently fall so far short of our ideals, why we so often hear the criticism that our boys and girls when they come from school are so poorly equipped for the business of life. Only recently during some convention here, an item appeared in the public press, an article, I believe, for which Mr. I'otter, our superintendent, was somewhat responsible, which referred to what they call the "White Collar Poverty,"—that vast army of men and women who pass through our colleges and come from our colleges annually only to find that they are either poorly or improperly equipped for the work of life. School masters all over the country, I believe, are awakening to a realization of the fact that a readjustment must be made; in fact, it has been begun, whereby these conditions will be met.

I do not want to speak to you as a teacher; I hardly dare pose as a teacher, but there comes to my mind sometimes in connection with discussions along these lines a few thoughts which I have gathered from years of connection with the public schools, and public school work. We often hear it said that there is something wrong somewhere with our school systems. You will pardon me if I speak upon this subject with more or less feeling, because I myself was a victim of that education that was so prevalent thirty to forty years ago, a system of education that was rather a pouring in process, than a drawing out process, a system of cramming, a system of education that made me study my United States history by committing it to memory, a method of instruction that made me study the Constitution and the Declaration of Independence by committing it to memory; and I have often thought that if there was anything really scientific about that method

of instruction, it was the scientific manner in which they had figured out how they could create the greatest disgust upon the part of the boy with a certain study, and cause him to forget it as soon as he passed his examinations—and I sometimes wonder if we have entirely passed from that old system of cramming. I speak today as a father who has had his children from the kindergarten up through the grades and through the high schools. My friends, there is a time for reckoning coming, there is a time for readjustment. I believe that conventions such as this are important factors in educational work, for we must remember that this readjustment is not without its dangers. There are those on the one hand who say we must never again return to the teaching of the Three R's; that courses have been enriched; that the children are better equipped than ever; and those earnest men, who are just as sincere, on the other side, who say that the time for teaching fundamentals has been encroached upon by these specialties, until the standards have been lowered all along the line.

Now, I do not wish to comment upon that phase of the question. There is probably a good deal of room for argument on both sides, but I wish to appeal to you this afternoon as a convention, that in your discussions you should not limit yourselves to those questions whereby you can improve your own specialties, whereby you can enlarge upon your field of school activities, whereby you can impress upon the public and upon school systems the character and importance of your work, but rather view the question from the standpoint as to how you can assist in solving these problems, how you can assist to fit your manual training and your drawing into courses of instruction so that they will have the effect of increasing, of improving, of bettering the entire scheme of public education. I want to say to you ladies and gentlemen that I believe in your work, and I hope to see the day when every girl shall be graduated from our high school with her credits in household arts, when every boy shall be graduated from high school with credits in manual training, when these shall be considered as important and useful as credits in literature, algebra, science, Latin and French; but to bring that about we must have the assistance of conventions such as this, and when we have completed that line of thought and work and activity, then will we have reached those ideals that will produce a school system in America that can reach out with one hand, and touch the infant fingers of the child in the crib, and with the other clasp the hand of the mechanic at the lathe—the real ideal.

Ladies and gentlemen, I believe my time is gone. I am sorry that his honor the Mayor did not appear. I am here in the double role of one who shall welcome you both as representative of the Mayor and of the Board of Education. I was not aware that the Mayor was not coming. Had I known that I would have stopped at his office and procured the keys to the city of Milwaukee, because it is customary on the part of the Mayor on an occasion like this to throw open our beautiful city and extend to you

AUGUSTYN

the hospitality we feel you can enjoy no where as in Milwaukee. I further extend to you on the part of the city of Milwaukee and its Board of Education and myself a hearty welcome. We feel proud of the fact that your Convention has selected this city for its meeting this year and we sincerely trust that your gathering in Milwaukee will be both pleasurable to yourselves as well as to us. I thank you.

ADDRESS OF WELCOME

BY MILTON C. POTTER

SUPERINTENDENT OF PUBLIC SCHOOLS, MILWAUKEE, WISCONSIN

I speak on behalf of the teachers of Milwaukee in welcoming their fellow teachers to our family circle, and we teachers of Milwaukee trust that you will make yourselves at home at all times. Keys will be unnecessary; our buildings are all wide open and they are all running full blast. The Girls' Trade School and the Boys' Trade School extend a particularly hearty welcome to these exponents of the manual arts as a saving medicine for the ills that beset our souls in modern American life, and they will be running full time today, tomorrow and the next day, and we trust that many of you will go into the Boys' Trade School and Girls' Trade School; but the real thing which you stand for finds its best exemplification doubtless in the regular grammar schools of the city.

This forenoon I had occasion (and most of my forenoons have been spent on the firing line with the teachers) to listen to boys and girls composing, and the sentence which they had received for expansion was: "It is a beautiful day in Spring;" and those paragraphs, ranging from one hundred to five hundred words, each contained phrases like: "And the songs of the robins were beautifully thrilling to the accompaniment of the breezes." There were phrases like this: "And the peeping May flowers knew that the Spring had come for the flash of the red on the breasts of the robins against the blue sky," and so forth, and so forth. Were those children quoting? Were they engaged in memoriter expulsion of what had been pumped into them? No. Those children varied as much from each other as the flowers they talked about. There was a live room; forty-eight belonging—which is a tremendous crowd for a teacher to handle the day long and forty-six present; the average attendance in that room I found had averaged forty-three this month, and each and every one spoke as though she were in the presence of an individual guardian; each spoke as though she were mother-trained.

Now, for a long time, as the President of the Board has so well appreciated, our children have been engaged in receiving processes; our children have almost exclusively given themselves to absorbing, to taking in, to receiving impressions. Every one who has given thought to physiological results in the nervous and cerebral matter from such long continued processes, knows that there is a positive dam finally erected against the transmission of the received impression into external expression.

Doing and the education of doing, finds in the group of teachers here collected a magnificent body of the congregation of the propaganda. Those boys and girls this morning were as much doing, were as much expressing the thing which had been previously impressed upon their minds as though they were handling pigments, or marble, or wood, or clay.

There went through these schools up to the age of fourteen a man who, at that age, insisted he could no longer endure to sit still, cramped and aching on account of the wood and iron restraint of the desk and seat which confined him; and at that age he found a job with the St. Paul railroad. I had occasion this morning to talk with a relative of that man and I said: "Didn't he ever get any more schooling?" "No." "Well, he certainly has made good." "Yes, he escaped in time."

He ran through the gamut of the operating jobs with the St. Paul railroad. At the very beginning, after being there a few months as a handy boy, the bookkeeper quit. This young man asked for the job of bookkeeper and said he could do the work and take care of his own work at the same time—he had already become bill clerk. The head of the road insisted that a boy should not receive a man's salary, it would have a bad effect. He didn't get a man's salary. The head of the office insisted that nobody should do this work but this boy, and he did the work which he had been previously doing and also did the work of the bookkeeper for his old salary, and he did it for eighteen months. He went on up until the Purchasing Agent needed a man of his caliber in his office and he was put in the office and shortly after the Purchasing Agent quit and he was made Purchasing Agent. Then he was taken by Mr. Van Horn, when he went into Canada, as the General Purchasing Agent for the Canadian Pacific.

And there also he immediately introduced the theory of every man doing something. He still believed in tapping the reservoir of initiative and potential power, which exists in all of us—if you will only permit people to do the thing which suggests itself after an impression is received. The result was that very soon after, from every brakeman and switchhand, suggestions came pouring in. Another result was they ceased taking lumber and ties from Sir Phillip So and So and they began to tap new areas for materials and that man went up and up until he is now the president of one of the greatest corporations under the sun, the Canadian Pacific Railroad, with its great fleet of hundreds of ships and its thousands of miles of track through wonderfully rich areas, and its beautiful stations, hotels, and other buildings scattered over all Canada. He is known as Sir Thomas Shaughnessy, whose relatives are so well known throughout this city, and it is asserted that he became so—if he became so for any reason that could be named by him—because he early escaped from the receiving business, from the operation of receiving machinery, of purely impression machinery, to the expression mill of a not too well organized office and shop where the men do things, where the men must compete with others, and express themselves daily and hourly, and all the time.

In reply to the famous criticism of our own railroad empire builder of the Northwest that we have wandered too far from the days of the Three R's, too far from the days of the fundamental indispensables of his day, he would assert that it was that generation of "essentials," it was that generation of memoriter grinding on so-called fundamentals and indispensables that gave the impulse toward what the empire builder calls "non-essential." The school days of those who later constituted the generation that could permit baby blindness to go on unchecked, that could permit grafting to proceed in the midst of the American public with mere sneering and smiles, that could permit police and traffic officers' unkindness to children playing in the streets and herded in alleys, are happily being forgotten. They could permit these things, because they themselves had been trained in a putrified institutionalism of always receiving and never reacting. To learn lines and memorize figures merely receiving instruments were sufficient. The idea of the mind as executant, the idea that the mind is the maker of its own environment, had ceased almost to appeal to them, and we have the two opposite leaders of those schools which Mr. Augustyn mentioned, the old-time school which stands for the few fundamental essentials, occupying the whole school day, and the new school which stands for the world of doing-things—represented by those two men, it seems to me. Consciously, or unconsciously, the one the empire builder, stands for the classical conventionalized institutionalism of the earlier decades of the last century. Consciously, or unconsciously, Sir Thomas Shaughnessy stands for that kind of schooling which he got in the shops and offices in spite of conventionalized institutionalism of the last century, by leaving it, by escaping from it, to get the education resultant from constantly doing things.

I obtruded myself a few nights ago into the home of a Milwaukee man who said he was going to invite in some representative people of the city to welcome me; there were some leather manufacturers, and there was a brewer, and one or two iron mongers, and a stove manufacturer, and as we sat and talked somebody suggested that So and So had not brought his cello. He lived not far away so he ran off and brought back his cello, and pretty soon a couple of violins turned up and we had a delightful concert, and everybody had to do something, even I. You and I have come to a city whose people believe in expression of that which is in them, of the use of the talents which they possess, all the time; a people which believe in expression as a means of education. That is the very *raison d'être* of your peculiar teacherhood—expression as the means of education, doing as the only way of learning to do; and I believe that I am not going beyond the real truth of the belief of the mass of school administrators in this country, when I say that the process of education as a whole will sometime be the doing of the things we know or wish to know—the expression of those things. A great deal more is coming to child-happiness, a great deal more is coming to child-efficiency by reason of your existence, by reason of your

constant insistence upon the necessity of habitual doing if one would live a sane, happy and efficient life, than from any other one source in all American education.

I have been in Milwaukee only a short time; I am a stranger here, which makes me feel fine to be welcoming somebody to Milwaukee. I have been the one received, myself, but now I have been invested with my citizenship, my Milwaukee citizenship, when I can welcome some one else to Milwaukee. When I came to Milwaukee I discovered that the neighbors around me had shops for their boys. The boys were doing things, and there was a constant desire on the part of the teachers to know what the boys were doing, and several of the teachers were visiting in the homes to see what the boys were doing at home. I got a shop for my boys and they don't have to run around the city for entertainment; they are no longer attracted by the processions that pass along the avenue; they have things to do.

And I assure you that unless this entire Republic gets that Milwaukee conception of the joy and delight of doing things at home, the nation will bankrupt itself.

No one other than a banker, and the man who just spoke to you is himself a banker, recognizes so clearly the fact that the six billion dollars spent in this country every year between the hours of six in the evening and midnight will ultimately bankrupt any people anywhere, not only as to its mere metal money, but as to that more important and indispensable wealth, spiritual and physical health and happiness. By doing things at home, in those homes in my neighborhood—and I happen to know many other neighborhoods in this city where the same thing is being done—by doing those things and leading our little ones to do them, we will help our children to cut down expenditure of health and of money, and we will do much to help them build for a happy and efficient future. Now, you men and women by teaching the elements of the doing-arts in the schools are contributing to the sanity, wholesomeness and future welfare of all American home life, without which a national life shortly becomes impossible.

RESPONSE TO ADDRESSES OF WELCOME

BY ROBERT W. SELVIDGE
PRESIDENT OF THE ASSOCIATION

On behalf of this organization and personally, I desire to extend to you our sincere thanks. I assure you that we appreciate the opportunity to meet in your splendid city. From the courtesies extended to us and the many kindly greetings we have received we know that your words come from your heart.

We feel that we are especially fortunate in being able to meet in Milwaukee. You have the distinction of being the foremost city in this country in the establishment of public trade education. It is doubtful if any other city in the country strives so hard, or succeeds so well in making the public school system serve the interests of its people. For this reason we are particularly glad to meet with you and to have an opportunity of studying your schools.

We have in our exhibits representative work from different parts of the country. We believe that these exhibits are worth studying. We cordially invite the people of Milwaukee to attend our meetings and visit the exhibits. You have generously welcomed us to your city, and we wish to welcome you to our meetings and to our exhibits with the same cordiality.

In the preparation of our program we have endeavored to bring here some of the best speakers in the United States. I have attended many educational meetings and I believe we now present a program equal in quality to that of any association I have ever attended. We believe that our speakers have some vital things to say on the vital topics in education today. We want you to hear them.

THE PRESIDENT'S ADDRESS OUR FIELD OF SERVICE

By ROBERT W. SELVIDGE

PEABODY COLLEGE, NASHVILLE, TENNESSEE

The general topic of this meeting has been announced as "A Casting of Accounts, Educationally, of the Fine and Industrial Arts." If this means that we are to discuss where we stand and where we ought to stand educationally, I think a more important topic could not have been selected. In my brief talk to you I shall not attempt the role of reviewer, or of prophet. I simply wish to point out to you a few facts, and suggest to you some considerations which I believe will enable us to define more clearly the lines of our activities.

During the past few years we have heard much criticism of Manual Training in the schools. We have been advised that such work is useless and wasteful. That some of these criticisms are true we have not the least doubt. But in general we know that they are unfair and unjust. Permit me to say to you here and now that I am not ashamed of the term "Manual Training." I am not ashamed of the work done, and the ideals fostered under that title. On the contrary I am proud of the work of such men as Woodward and Bennett and Leavitt and Richards and hundreds of others who have not let criticism, newspaper controversies and the cry of the "demand of industry" obscure their vision. They have stood manfully for the demands of humanity, and the requirements of good citizenship. A good citizen ought to be a good producer, but production is not the chief end of man. When we break the lives of our little children in the mill, or curse them with the monotony of an endless task, we do it only that some one may consume more cheaply or more abundantly. It must be said to the credit of the men who have directed the manual training movement that they never have lost sight of the interests of the child and the educational principles upon which this work is based.

We have taught manual training chiefly for two reasons. First, because it would make our students better producers and better consumers. Second, we thought it would make them better citizens because they would understand more fully the view points of the different groups of workers. It must be clear to all of us that most of our industrial troubles come about through a want of understanding among the different groups of society. Our industrial troubles and discontent are not the result of a wilful desire to injure someone else. No group of workers go out on strike and take up what they know to be the inevitable struggle with starvation except in the

belief that they are greatly wronged. The employer who understands the workers viewpoint is likely to be generous and just. It is important that the workman should have technical training, but it is just as important that he understand his relations to society, and it is perhaps more important that the employer understand something of the hopes and fears and the struggles and failures of his employees. The individual who has done some good hard work with his hands and who understands something of the difficulties of production will have sympathy and understanding which he could not acquire in any other way.

We believe that manual training has opened up new fields of endeavor to vast numbers of boys. It has been valuable to them not only from the vocational standpoint but it has broadened their view, given them a broader outlook and a clearer understanding of what life means.

This is an industrial age and unless the boy grasps this idea and becomes familiar with industrial processes and industrial methods he fails to grasp one of the most significant facts of modern life. In my judgment, the youth in the high schools who is to enter some profession, such as law or medicine needs manual training vastly more than the boy who is to enter some mechanical pursuit. The reason for this is clear. If the youth who is to enter a professional career fails to get this particular training in the secondary school he will not get it at all, while the one who pursues a mechanical career will get his insight into industrial life later on.

In two respects we have shown weaknesses. One of these is the tendency to take up fads and fancies without a careful examination as to their value. In doing this we have sometimes subjected ourselves to just criticism. This has been to a large degree the result of inadequately trained teachers—teachers without a proper background of educational principles. There has been such an enormous demand for teachers of this subject that boards of education and superintendents have been willing and sometimes almost forced to employ those who have had little training and who have failed utterly in other lines. Any of you who have been connected with Summer schools know that every summer you have a large number of students who expect the training of a six weeks' Summer session to make them thoroughly competent teachers of manual training. It is quite clear that these students are not the only ones who have this notion because usually they have signed a contract to teach this work before they come. This presents a serious problem to us and the members of this association ought to try to evolve some scheme to prevent the entrance into our profession of incompetent persons. Presumably we are guarded by teacher's examinations but you know how ineffective examinations are in all new subjects where the demand for teachers is greater than the supply and particularly in our line of work.

The other weakness I wish to mention is one found in all organizations as soon as they become standardized. It is the inability to realize that society moves forward and its needs of today are more than likely to become

incumbrances of tomorrow. You may standardize processes and give definite rules for doing a thing but you cannot standardize "what to do." The attempt to do this results in the overcrowding of the curriculum with things long since dead. We must apply to all the work the test of present social needs. This we have not always done. In some high schools we find students working out the same set of exercises used in a Russian engineering school forty years ago. In others we find them carrying on lines of work which are excellent, as a means of pleasantly employing the leisure hours, but absolutely without value from the industrial standpoint. It doubtless is well to teach a boy to turn out a piece of furniture made entirely by his own hands but it is also well to teach him how these things are usually made. On this last point manual training teachers have sinned greatly.

It should be understood that manual training is not a vocational subject any more than arithmetic is. Both subjects are important parts of a general education and both may be given a direct vocational trend or they may be made quite general in character. In the past our attention has been directed chiefly toward the general character of the work. In many instances attempts have been made to give the work a vocational trend, and in some cases we have made the somewhat doubtful experiment of permitting the local industries to control the character of the instruction. General observation and rather careful investigation seem to indicate that local industries have little to do in determining the line of work a boy will pursue. The population in America moves so freely from place to place that a system of instruction based largely upon the character of the local industries is unsafe.

We have a right to be proud of the work done under the name of "manual training" but the time has come when we must do more. To provide means of general education has long been recognized as a duty of the state, and we have contributed splendidly to that work. There are certain things every good citizen should know without respect to his vocation, and there are certain other things which he should know because of his vocation. In the past our contribution has been to the former group, but in the future we must contribute also to the latter. Because of the character of our work and our training we are better fitted than any other group to take up vocational instruction.

However, before we can do anything worth while it will be necessary for us to get away from the idea that adequate vocational instruction can be given in the schools as at present organized. The ordinary school room is a very poor place to teach the business of life. It seems strange that society should desert the youth just as he is beginning to learn his life's work. The most unfair thing in public education today is the fact that the state provides abundantly for training men for professional careers and provides almost nothing for the training of workers. It is as essential to the welfare of society that the youth receive careful and thorough instruction while he

is learning his occupation as while he is learning to read. And it is just as essential that the state assume the responsibility for the one as for the other.

The place to learn a vocation is in it and the time to teach a vocation is when the boy is trying to learn it. The State of Wisconsin has made a splendid step in the right direction but needs to go further. Its laws give the educational authorities definite but limited control over the children between the ages of fourteen and sixteen who are engaged in gainful occupations, and provides that these children shall receive a fixed number of hours' instruction in schools per week. This is an excellent provision as far as it goes but the time allotted to the school work is too small. A further point of weakness is in the fact that it does not provide for instruction in the shops where these children are regularly employed. A system of public school instruction within the industry is absolutely necessary. Such a system under the control of the educational authorities would prevent the exploitation of children and would permit a wholesome amount of instructive and productive labor. A reasonable amount of labor in a healthful environment accompanied by instruction and responsibility are necessary conditions to the proper development of a resourceful and self-reliant man. But we cannot reasonably expect the individual employer to provide these conditions.

In conclusion I wish to say that in my opinion, it would be an easy matter for the state so to control and direct the activities and education of children in juvenile occupations that these years may be years of profit rather than waste. The education of each child should continue until he has learned an adult occupation. Juvenile employment should be recognized as temporary in character, and if children must go into industry, we must go with them. At least half of the workers' time should be devoted to the preparation for an adult occupation.

In this connection some broader interest should be cultivated. The division of labor with the consequent automatic processes is a necessary part of modern production but the human mind cannot long endure the monotony of continuous contemplation of an automatic process. In an occupation which requires little thought and is largely automatic it is of the highest importance that some wholesome interest be established outside of the occupation. If a wholesome interest is not established, an unwholesome one will be. Our system of education then fails unless we stay with the worker until we give him something to think of besides his endless task.

PRESENT DAY PSYCHOLOGICAL AND EDUCATIONAL ASPECTS OF THE FINE AND APPLIED ARTS

BY CARROLL G. PEARSE

PRESIDENT MILWAUKEE STATE NORMAL SCHOOL

You have done a strange thing to assign such a topic to one who is far removed from any practice of the fine arts, or the applied arts; one whose attention is given to the administration and conduct of affairs; who attempts to compose the thronging events and assist them to move forward in orderly procession. But since the coming of this convention is a most important event, the word of your chairman has been accepted as law, whatever doubts I may have had as to the wisdom of the venture.

We are told that the artist himself has no thought of the psychology of his art productions; that he feels stirring in him those powers and perceptions whose expression in artistic forms gratifies his desire for self-expression in the creation of beautiful things—objects of art—and he models the statue, or paints the picture, or rears the temple which delights the aesthetic sense and satisfies the craving for beholding beauty which is felt by all men. The artist sees the vision; he sets it forth in forms of material representation, and the work delights or uplifts the souls of his fellows. But he does not stop to analyze his sensations—to note what portion of his satisfaction comes from the muscular movements of his hands and body as he works, what from the movement of the eyes and the muscles which control their action as they follow the extending line or the flowing curve, or the satisfaction derived from the chemical effect of light, in different colors upon the sensitive substance of the curtain which receives the image of his production, as it is thrown back through the chamber of the eye. He does not consider what portion of his satisfaction comes from the knowledge that his fellows will not only see and enjoy, but applaud his effort. Nor does he estimate the acts and processes through which pleasure is given to those who see his work. He does not consciously estimate the satisfaction they will get from his arrangement of symmetrical horizontal balance or his variety in vertical arrangement; the satisfaction of the muscular sense from the actual or imagined adjustment of the eye in following a good curve or a well placed line; or the sensations attendant upon the decomposition and absorption of retinal substances, under the influence of light of different colors. And as the artist is not conscious of these interesting facts and movements, perhaps we may be excused if we leave the consideration of these

minute and abstruse causes and processes through which the work of the artist and its influence upon the beholders are produced.

We do know that certain forms, and certain arrangements of lines, certain proportions and certain arrangements of objects or units, as well as certain colors and combinations of colors, satisfy the eye which is trained to see their beauty and appropriateness, while certain other arrangements and combinations or lack of arrangement are not pleasing. We, in the art work of the schools, are confronted by the opportunity to establish in the pupils a familiarity with the standards of good art—of harmonious arrangement of line and color, an understanding of correct proportion and well organized design.

It is said that a great art comes to a nation which is wealthy, which has a distinct and vital national spirit and consciousness, and whose common people love art. We have wealth; our national consciousness is showing yearly greater evidence of a vital quality; it rests with the schools of the people, and you, who have charge of the teaching of the elements of art in the schools of the people, to develop in all the people that knowledge and that love for beauty which will give to us a national art.

This art, when it comes, will find in the homes of the nation a perception of the beautiful, which is also the appropriate; this will be shown in the proportions and lines and in the colors used in the exterior decoration of their houses, and in the trees and lawns and flower gardens which are their accessories; it will appear in a knowledge of good form in the useful articles of the household, which will banish the ungainly chairs and sofas and tables and bedsteads of that era which still remains in too many localities; it will appear too, in a vastly different standard of wall and floor decoration, as evidenced both by their design and by their coloring.

The people in these homes will understand, as some are already coming to see, the appropriate and beautiful in dress; they will not be at the mercy of dressmakers and milliners and tailors and shopkeepers, either in the materials or the fashion, or in the color or the combinations of colors which they will wear.

A people so educated should enjoy and seek pleasures of a higher sort. They should be appealed to by the beautiful in nature and in art. The trees and the grass and the flowers of the parks, and the out doors and the sky of the open country should attract them; they should enjoy the art of fine buildings and statues and pictures. And in this understanding of and sympathy with the beautiful they should have acquired some repose; they should not be so dependent on crowds and the excitement of events; they should crave less the melodrama, the moving picture show, the "amusement park." An appreciation of the beautiful and a knowledge of even the simpler underlying principles of art may open up a new realm, into which one may enter for rest and recreation and there escape for a time the more tawdry details of life. This enjoyment of art is removed alike from the list-

lessness of over-weariness and the insensibility that marks a lack of interest and appreciation for those things which are beautiful; it is marked by a mastery of the soul which withdraws it from a feverish pursuit of events and excitements and bids it contemplate and enjoy repose in the contemplation of beauty.

This general dissemination of art knowledge among our people, something possible only through your work in the schools, will be certain to develop a far greater number of performers of varying degrees of artistic ability. Many fagots brought together make a hot fire. Musicians stimulate more musicians; from the ranks of the stone cutters and wood carvers spring sculptors; from the engravers come artists in various lines. Where all are educated in these elements and many are trying their powers, the chances of finding and developing both talent and genius are many fold greater than when little attention is given to these things.

The work you are doing has another important aspect. All of us have the impulse to express ourselves. Our features, our bodily organs, our postures allow us expression of a sort; our organs of voice are most important, and by them, at first by crying and laughter and unorganized sounds which show our emotions or wishes, and later by speech, through which we communicate our thoughts, we have a wide and valuable avenue of expression; most of us learn to use certain conventional characters in writing and in this way are able to express or record our thoughts, to be revealed to others at another time or in another place. In an equal degree the fine and applied arts give to him who has been instructed in them an added means of self-expression.

This may be in a mechanical way, as in a working drawing used to save words and show more clearly the thing which is to be made; or it may be in a diagram or a crude sketch to render plainer something which a speaker or writer wishes to make clear, or to illustrate. It may be in the design and construction of articles for use or ornament: the erecting and decorating of the primitive dwelling; the making and the decorating of the articles of furniture and household use which it contains; the selecting of materials for and the fashioning and decorating of the garments to be worn; the apportioning of space and determining the lines of the beds in the flower garden and the harmonizing of the colors to be shown by the blossoms in them. All these not only give employment which builds and trains sound character, but they provide a means of self-expression; not only do they gratify the universal desire to create—to construct, but by means of them the designer and maker can embody his conceptions of beauty and harmony in line and form and color. And incidentally it might be noted that the man or the woman who has these arts and practices these forms of self-expression will be far less likely to suffer from the self-dissatisfaction and restlessness which drives for relief and self-forgetfulness to the saloon or the pool hall, or to the picture show or to "shopping." And,

finally, the arts which you teach give an avenue of expression for the higher thoughts and emotions of the soul. One who has learned them not only reads more understandingly the language of art in the works of the masters, but such a one may himself set forth his own thoughts and visions for the understanding, the praise and the uplifting of his fellows. Everyone learns oral speech, whether he use it haltingly and ineffectively, or with the splendid grasp and power of Demosthenes or Webster; I trust we may see the time when all among us will recognize the value of the arts you teach as a means of giving to all our people a more perfect and a more effective use of their own natures and powers, through giving them this added means of self-expression.

Primitive men understood little of the division of labor; each man or each family performed all the labor, practiced all the arts which were necessary to maintain himself or support the family or to render attractive the home and its belongings. The advance of civilization has been marked by the growth of specialization in industry; with the inventions of recent years and the development of power machinery, the change in industrial practice and in home conditions has been amazing in its scope and extent. Along the road of history those nations have grown strong who had to work in order to live and prosper. The Aryans of the Asian highlands, the Tartars, the Swiss, the Dutch, the English, the Germans, are all illustrations of peoples whom climatic conditions have driven on the road to power, in the conquest of weaker nations or in those stern qualities which have preserved their independence or given them industrial and commercial primacy. The founders and builders of this nation were of such stock. We have been able to possess the land because of the physical and mental qualities of the American people. But now a danger confronts us. An increasing proportion of our people are becoming city dwellers; in the cities, particularly, our division of labor has gone to dangerous lengths. Household industries and arts are constantly being transferred from the home to the factory and the shop. Less and less is there employment in the home for the members of the family; and particularly is this true of the women and the younger members of the household. This has an ill effect in two ways: The influence of lack of employment of an interesting kind begets idleness and irresponsibility, and creates a tendency to go out of the home to pass the time, and to seek entertainment and excitement. The young people of the home suffer a character deterioration from lack of duties for which they can be held responsible; they also suffer a physical and mental deterioration, or fail to develop their muscular and nervous system, including their brains, as they ought, because of lack of proper employment for their hands while they are growing up. Not only do the muscles, which are not exercised fail to come to their full development and strength, but the whole body lacks tone and vigor—the vital organs and the other muscles, as well as the particular muscles which remain only partially developed for lack of ex-

ercise. The boxer who depends on a big chest and thick arms does not win against that opponent who has also a well developed back and competent legs; and for the best success there must be an all around development—the hands and the body must also have done work, even though the feet have been well trained in all the tango steps.

Beyond this, it is known that certain parts of the brain preside over the activities of certain muscles or sets of muscles, and that, when these muscles are not exercised, not only do they remain flabby and ineffective, but those portions of the brain which have charge of those activities also fail to develop and remain comparatively incompetent; and, as in the case of the muscles, not only do these particular brain areas and their receiving and transmitting nerve connections fail to develop, but their weakness and ineffectiveness influences the entire nervous tract, and the brain and all the other parts of that important system are less usable and less competent than they should be. An all around development is possible only where all parts have their share of exercise to promote growth and develop power.

So we welcome you and all your tribe, as benefactors in this regard. You offer one of the most ready and effective means of providing interesting and valuable employment for the hands of the growing boys and girls of our cities—and without some kind of suitable hand employment their best physical and mental development is out of the question.

One phase of your work has especially a national aspect. We, as a people have overflowed our great country; all of it is conquered and reduced to subjection; pioneers are no longer required. It will not be possible, to any extent, for us longer to exploit the bounty of nature and to send abroad raw materials in exchange for the products of foreign skill. We need more and more of our production of food at home; other and newer lands are supplying to those peoples who do not produce their own food or raw materials, the supplies which they once procured from us. We still need and desire, however, many things which we must buy abroad, and to get these, we must have something to sell abroad. It has become necessary for us, therefore, to rely not only on the bounty of nature, and on our genius in the invention of labor-saving machinery, but on the excellence and attractiveness of our wares. We must send to buyers in our home market and to foreign buyers, alike, a product which can compete with articles offered in competition, both in excellence and in attractiveness. To proper training for the industrial arts we must look for those standards of excellence and that high quality of workmanship which are essential to the production of articles of the necessary value and finish; upon the application of the fine arts to the designing and ornamentating of the article made we must look for their beauty and attractiveness. And in you and your fellow workers who are teachers and directors of education in the fine and industrial arts, we must place our chief reliance for creating and improving the standards of excellence and attractiveness which are necessary.

PEARSE

Milwaukee is an industrial city; her chief wealth is in her workshops, and in the skillful and industrious hands which in those shops fashion the crude products of nature into articles of use and beauty, desired by men everywhere. It is, therefore, with special satisfaction that Milwaukee welcomes the members of the Western Drawing and Manual Training Teachers' Association. This city and others like it are already greatly under obligation to those who have wrought in the educational field which you till; we are conscious that, as the years pass, we must, in this country, if we are to prosper, pass more and more deeply into debt to you and to those who shall succeed you.

GENERAL VS. SPECIAL EDUCATION

A DISCUSSION OF RELATIONSHIP BETWEEN CULTURAL AND VOCATIONAL SUBJECTS.

BY HOMER H. SEERLEY

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The Contest.—Fifty years ago the contest for supremacy in the curriculum of the college was between Ancient Languages and Modern Languages and between the Languages and the Sciences. The control in most faculties was in the hands of those who believed in the old standards of latin, greek, and mathematics, and, hence, opportunity for the newer lines of study was restricted as much as possible. It was the voice of those outside of the faculties that demanded a place for modern languages, the sciences and later for history and politics as proper substitutes for the old standards that prevailed, not a change of opinion among the scholars who were responsible for college education.

I shall always remember the lack of sympathy that was accorded to me by the leading members of the faculty where I went to college because I became a candidate for the new degree, Bachelor of Philosophy, rather than for the old and established degree, Bachelor of Arts. On the day of graduation the innovators were so called on the class roll to receive diplomas as to indicate that they were not regarded as having equivalent culture and education to those who submitted to the old time course of study.

The Rise of Engineering.—In like manner the engineering courses had a difficult time in obtaining recognition from collegiate faculties and it became necessary to organize separate faculties in separate colleges even in state universities before the engineering student was accorded equal recognition and fair consideration with those of liberal arts. In a way the same thing has been true as regards the study of agriculture, of the mechanic arts and even of teaching, as otherwise the studies of later origin and acceptance were not conceded as having equivalent status and of deserving acceptability in the planning of an education of real importance and worthy of endorsement.

The Preparation of Teachers.—Even in the preparation of teachers there has been constant discrimination in favor of old time studies and against such new developments as music, drawing, manual training and home economics. It became necessary for the United States Government to make appropriations to be offered as subsidies to the states to

get such attention to practical and industrial training as the welfare of the masses required, in order to break down the traditions and give the proper attention to the kind of education that the present age demanded. State Agricultural and Mechanical Colleges, State Normal Schools, Technical High Schools, and even Art Schools and institutes have originated as a protest against the conservatism of educators, being organized as separate institutions dependent upon their own initiative and enterprise to show that they are genuine movements among the people for complete, practical education. It has been found impossible to secure such reorganization and readaptation of present day education as would give a chance to all the various courses of instruction that are necessary for the education and training of all the people.

The Division of the High School.—The problems of secondary education have not been much easier to solve and as a consequence there has been a constant tendency to found new schools with different motives and with different functions in order to permit the variations and differentiations that a complex situation requires. Some prominent educators have regretted this division of forces and have plead for the same education for all on the assumption that these diverse organizations in training must separate the American people into classes and thus destroy the democratic status. But despite their views and arguments, the division is rapidly taking place and choice is made by individual children as to the special training they should take. Springfield, Massachusetts, has its Literary High School, its Technical High School and is now to have its Commercial High School, in order that the demand of the people for the proper training for all their children could be met. It is recognized that there is great inequality of taste, of talent, of initiative and of usefulness in the lives of men and women and that education to be appropriate and economical must be differentiated to meet the actual needs that these inequalities of personality and of adaptability must require.

Educational Standards.—The attempt to standardize American education has not been a success worthy of endorsement. The belief that there are certain exact studies that can be so arranged as to meet the universal need and give the best training for all has not prevailed among the masses. The notion that there is a single way to culture and to development, that there is a definite course that will guarantee thinking power and individual capability, that there is a plan to be discovered that will insure true individuality and personal usefulness for all who accept it, may be an attractive solution of a complex problem, but it is probably not worth discovering even if it were possible and its mission would not be honored when applied. These variations in educational plans are not errors, nor idiosyncrasies, nor *reductio absurdum*s, nor

blundering applications, nor unreasonable efforts to find easy ways to be trained and to be developed. They are real solutions of real necessities that are found in a real civilization and are to be commended for the noble part they play in contributing power and efficiency to the human race that is working out its destiny on the American continent.

Superiority of Ideals.—Education is a much larger proposition than is commonly assumed by many would-be philosophers who endeavor to think out the problems of civilization. There are multitudes of ideals that can be classified as good and worthy of being relied upon in working out successfully a human career. There is such a thing as superiority of ideals when applied to a single profession, a single occupation or a single vocation, or when interpreted as adapted to the training of particular classes of pupils that are being educated, but as a universal proposition there is no superiority of ideals that can be depended upon in the selection of studies for a complete education. For example, the English language may be necessary for an Englishman or an American but not so essential for a German, a Frenchman, or a Russian; the studies of mathematics may be necessary to the accountant, the engineer and the school teacher, the languages may be necessary to the diplomat, to the merchant or to the scholar, but it is possible to be a useful citizen, a prominent publicist, an effective thinker without being qualified to represent all these standards in a single life or in a single career. Even a college education is not essential to enable a man to be a successful thinker in the practical, prominent lines of business that constitute the work-a-day world. Some of the most wonderful examples among the successes of these years of progress and development have been those who entirely lacked the standards emphasized by general education through the medium of the schools.

An Invidious Comparison.—It is not best to think of any kind of education as being opposed to any other kind of education. It is not appropriate to assume that there is a strife that is detrimental between the representatives of the different ideals that educational work has developed. Such comparisons are out of place in such a civilization as has developed in such a country as the United States of America. General education as a system that professes to ignore the practical and the vocational, as unworthy of attention and as unnecessary to a full-rounded training, can not meet the demands of the time. General education such as is found in the better primary and grammar grades when properly and wisely taught is all absolutely deserving to be classified as vocational to the highest degree because these branches are directed to the putting of the pupil into a full command of all his powers. Neither can special education be so particularly organized as to omit entirely the fundamental lines that have always been recognized as essential to the qualify-

ing of a person so as to make him at home in the civilization where he has his life to live. There can be no fair controversy upon these questions for when such does exist then there is represented the ignorance of even the intelligent and the foolishness of even the wise.

Time Wasted.—The modern school has a padded curriculum. In the attempt to be thoro and efficient, it requires months and years of children's time that could be better served by other kinds of activities and interests. In the fear that certain qualities of skill may not be reached the branches of study are strung out into details and exercises that are entirely unnecessary. The value of much of this so-called training is overrated and exaggerated. The multitudes of applications and of drills that are exacted are unreasonable and undeveloping because they neglect the spontaneity of the child to be trained. If half of the time now assigned to primary and grade work in the so-called fundamental branches was granted to vocational instruction and training, the essential attainments in culture would not be reduced. The time allotted to the seventh and eighth grades as the public schools are commonly conducted is given to activities that can not appeal to children of such ages and is wasted in endeavors that do not contribute much that is worth while to culture or to efficiency. The curriculum of the seventh and eighth grades is continued for historical and customary reasons rather than for common sense and for intelligent reasons as these grades have no other service except to occupy the time of the children for two most remarkable years of life that should be entirely applied to development and to character training.

Vocational Guidance.—The larger need of the present day attempts in education is found in the line of so-called vocational guidance. The pupil in the city schools is much handicapped in this regard because he has so little opportunity to test capability in many vocational activities. He does not have a chance to get into touch with what men do and thus find his place as a worker for the common good. He is shut away from the experiences that he really needs to know what applied work means and thus be able to recognize his place as a personal contributor to the civilization in which he lives. If he works at anything, it is certain to be something that is non-vocational and, hence, does not train him for efficiency. Running errands, selling newspapers, performing ordinary labor, undertaking common tasks, all are so non-vocational that they are mere routine and do not sharpen wits or train character. The young man and the young woman need better conditions than the signs "No Admittance" or "Keep Out" give them. They must see, they must test, they must try, they must undertake if they are to be trained. This is why vocational education must be universal and why guidance should be complete and reliable. The reason why the boy and girl of the farm possess so much adaptability, so much capability and so much keenness

is because they have had such a large chance for the use of initiative in so many kinds of occupation. Industrial life in all varieties is around them every hour of their service and they acquire an inclination and a knowledge that is very remarkable for variety and for efficiency.

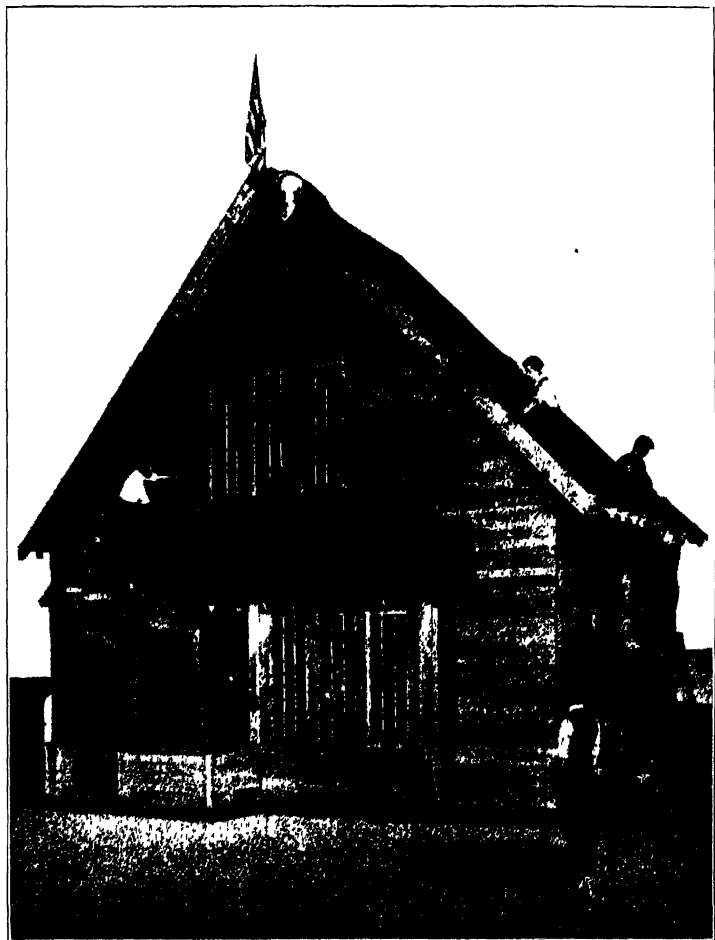
The Failure of Education.—It must be recognized that there is much failure in education. There are college graduates who are scholarly enough but who can not apply it to any particular end. There are plenty of so-called educated people who enjoy the studies they have pursued and who keep on enjoying them ever afterwards. They never advance from the rank of student to the rank of men of power and prominence. This is not caused by their going to college but by their assuming that scholarship is an end for scholarship's sake. This is no more true than that efficiency is an end for efficiency's sake. Education has no real merit unless it leads to applications of helpfulness to society, of developments of power for serviceableness, of ambition to be somebody by doing something uncommonly well. There is not time to study everything, and even if there were it would be a great mistake to do so. Quantities of information, expansions of knowledge, largeness of accumulations are to be judged by what the possessors do with such acquirements.

Vocational Education not a Panacea.—It must be recognized that vocational education is not a remedy for the ills of society. It is not a panacea for the misfortunes and failures that men are heir to thru vicious habits and immoral life. It can not redeem a soul from the bondage of sin. It does not insure a person a right attitude toward labor or economy. It is simply another type of education that every person who is in the schools should have. It can not substitute for other kinds of education but it increases the chance and the practicality of everyone who partakes of it. It is easy to over-estimate the value and the possibilities of institutions and to conclude that civilization is secure because such and such training is in existence. Idolatry was the curse of ancient civilization, ecclesiolatry the curse of the middle ages and institutionalolatry is the curse of the present time. It is unsafe to depend upon institutions as the souls of men have other things to do to be safe, sane and sanitary.

The Teacher Supply.—The chief source of weakness in special education today is the lack of competent teachers. Nothing commendable is possible unless the live, effective teacher reaches the live, energetic pupil. Legislation may state the day when the work must be begun but the gravest disappointments follow unless instruction is reliable. The propaganda will be discredited unless the results that follow are actual and creditable. The public can easily be deceived as to the results of general education. It may go on from year to year and excuse apparent deficiencies and shortcomings. But it will not be able to be deceived as

to vocational education. It is of a character, of a kind and of a quality that even those unschooled can decide with reasonable conclusions whether the instruction and training is worth while. This relation to society must be appreciated, this test of success must be accepted and this realization of conditions and prospects must be anticipated.

The times are ready, the people are willing to advance, vocational education is on the crest of the wave, the popular clamor for its introduction is universal, the exigencies to be met must be that of actual efficiency, and the spirit of the work must respond to the demand for the deed. Glory, greatness, distinction and renown are sufficient in quantity to urge every worker for humanity's betterment to seek the highest excellence and the largest outcome.



CARPENTRY EXHIBIT
Milwaukee Public School of Trades for Boys

REVOLUTIONS IN ART—WHAT THE POST- IMPRESSIONISTS AND THE CUBISTS ARE STRUGGLING FOR

BY DUDLEY CRAFTS WATSON.

DIRECTOR MILWAUKEE ART SOCIETY.

Each of us in our careers often pause with a spirit of discouragement wondering whether we have chosen the right thing to do, wondering whether we would not have done much better at something else, wondering whether our work has been altogether efficient. This pause is the very best thing for us, for it calls forth great strength to conquer that doubt—which we absolutely must conquer—and the conquering of that doubt clears a pathway not only for ourselves but for all of those with whom we come in touch, and we go on with the work of civilization, the work of education, the work of elevation.

We find, as a body of art educators, something suddenly confronting us today which makes us all pause and question the advisability of what we are doing, the advisability of what we have done and it makes us wonder whether we have any judgment or standards whatever in what we have learned, for today, just at the very moment when we think we have learned something about the harmonies of color, something about the correctness of architectural lines, something about the beauties of the representation of the things of our life, we see brought before us in the city of Barcelona, Spain, for instance, whole streets of buildings, built at a great cost, having in them no straight lines, having no regularity of form, having nothing in them, but forms which are inharmonious, barbarous, weird from our traditional standpoint. It is called the "neveau" architecture, the new architecture; and when we pause to hold, side by side with this new Gaudi movement of Barcelona, a bit of Gothic architecture, they laugh and scoff at us and say that we belong to ancient history and that we are not living in the modern age.

Then we have brought to us some music written by Schoenberg and Ravelle and their followers in Germany and France, music that begins with dissonants, begins with discord, outrageous, where the various voices are used to carry along melodies in various keys at identically the same time; where the time of the whole piece is in four-sevenths or five-eighths; where the pieces leave off with a discord, unfinished, unsatisfy-

ing, where we have no lines, where we have no rhythm, no harmony of tune, as we understand it; have nothing but tone; and we are told that Beethoven is absolutely ancient history, and that Wagner is obsolete. We think this is all a great joke, something to scoff at, until we see many musicians, among whom are educators, and among whom are connoisseurs and lovers of beauty, holding up a support of this movement.

When we realize that these workers are absolutely serious, that is, when we are told they are and become convinced they are serious, we must pause and look at what they do.

Even now, when light and shadow forms have been brought to great realization in the chiseling of marble or in the casting of bronze, one of the most distinguished of the French sculptors comes forth with a rather badly proportioned egg; puts on the front of that two enormous Egyptian eyes, that are not mates, two pin holes for a nose, a tiny slit of a mouth, then stands beside this two stalks of asparagus and calls this the portrait of Madam Pogany,—we think that we are being laughed at, or that the artist has escaped from some asylum. When we have handed to us in our modern exhibitions of painting representations of the most horrible monstrosities in form, and the most outrageous combinations of color, when we have green, blue, orange, pink, red, and five more kinds of color, perhaps, put on in squares and daubs; when we have a figure painted in pure yellow, with a red meadow and a green sky, painted behind blue trees, and we are told that is pure color and absolutely true color, we wonder where our intelligence has been all these years.

In literature, when Gertrude Stein, who has lived in Paris a long time, writing for publishers who pay her fabulously for her work, uses few periods, no capitals, seldom a comma, and it is called the purest literature, we wonder why in the world we go on with our universities and colleges.

When we have poetry by Signor Marinetti, which is simply the repetition of letters, or vowel and consonant sounds, which he calls Futurist, and which is supposed to be far greater poetry than the world has yet had, we wonder what poetry is. Possibly, I can give you one of Signor Marinetti's poems: T-l-a-e, t-l-a-e, o-h-, -o-h, c-h-r,r,r,r,r, c-h-g- r,r,r,r,r, locomotiv.

Signor Marinetti at least is so devoted to his new poetry that he addresses an audience of some distinguished and learned men, and many of the rabble, in a great theater in Florence. They throw vegetables and all manner of things at him, he reaches out and grasps an orange that comes his way, peels it and eats it in the greatest composure, he wins his audience and then turns about and hurls fresh insults at them, winning their hearts completely. We wonder whether or not we have taken leave of our senses.

Then we wonder why in the last year, five distinguished American painters have laid down their academic palettes and have said "We belong to the ultra-moderns and shall paint as such." I wrote not long ago to one of our most noted painters, asking him to send us for exhibition some of his modern paintings. He replied that his spirit, his viewpoint was changing so radically at the present time that he could not exhibit for at least one or two years more. His pictures have brought such sums as six to ten thousand dollars and yet he cannot exhibit now for two or three years, because his ideas are changing.

When in stage-craft there suddenly comes a pantomime from Germany where the actors enter the stage from the audience, where they wear strange, weirdly painted, and weirdly proportioned costumes, where they go through this pantomime against no background whatever except light, simply green or yellow shafts of light against the darkened stage, we are experiencing a very sensational dramatic revolution and do not know what it is all about. When in Germany Mr. Reinhardt is producing Shakespeare in such ways; when he produces an old Greek drama, with darkened stage and all that is visible for an entire scene is a thousand pair of groping hands, reaching out of a dark sea into streams of ghastly light, we wonder what drama really is. We have lately had a taste of the same thing, but we perhaps can enjoy thoroughly and without effort "The Yellow Jacket," and in this perhaps we have a key to what it all stands for.

All of these things seem at the present time to be utterly overthrowing every one of our traditions, we do not find it altogether confined to the Bohemian, art students, Latin Quarter, circles or centers, but the established creators of architecture, music, poetry, painting, literature and so forth are actually accepting many of them.

When we look back at what the development has been in perhaps the last seven hundred years and realize that in the beginning of the 13th century the greatest revolution perhaps that ever came in the art world was brought forth by Cimibui when he carried into the streets of Florence a Madonna that seemed to have a flash to the eyes, and rosy cheeks, it was utterly the first of all realistic representation that had been conceived in the Christian era. From the time of Cimibui to and through the year 1900 has been an almost unbroken development of an attempt to realize the beauty of reality to realize the beauty of life, to represent the beauty in the material of existence, to become utter realists. With this in mind we realize that there is a reason why eventually there should be some change.

We know that the art of Phidias and Praxiteles in Greece can never be imitated by another. If anyone wishes to do the same thing that Phidias and Praxiteles did they will always be compared to Phidias and

Praxiteles; and those things they accomplished were such perfect things that we realize they cannot be done better. They are the finished products.

We realize that when a thing is once finished it should never be echoed or imitated or done over again. When we look, for instance, at the great strength of Michael Angelo, the ideal beauty of Raphael, the profound loveliness of Da Vinci, we realize that those three expressed in the art of painting and sculpture has never been equalled in their same directions, because no one has really attempted to do these things in the same way, except the men who immediately followed. We are all aware that the late Renaissance painters and their followers were not as great as the three I have mentioned; because they overstepped the bounds of their medium, overstepped the limits of expression reached by the great three, their work became excessive, and the moment a thing becomes excessive it loses its beauty, strength and truth. The moment a thing is over-done, it is carried beyond its true, pure height, then fails, and a decadence sets in in that expression.

For example, when we look at the work of Velasquez we realize that he brought a certain kind of realism to a great height. Standing before his picture in the Prado gallery in Madrid we stare, discouraged and aghast, and wonder why it is or how it is that any one since Velasquez' time has attempted to paint or represent in portraiture real people standing in the subdued soft, silver light of rooms.

Inasmuch as there can be no more perfect things than the portraits of Van Dyke, they are perfection; there can be no more perfect things than the music of Beethoven, it is perfect music, exhausting the arrangements of simple harmony; there can be no more perfect thing than the drama of Shakespeare; it is so complete, so all-inclusive, that no other Shakespeare can ever be; any one trying to write plays as Shakespeare, to write music as Beethoven, paint portraits as Van Dyke would utterly fail, for they reached the height and if others attempted it they would be but imitators, plagiarists; and yet we know these three did not put a stop to their respective arts. There are always new gates to open; new horizons to scan.

We know that every artist from the kindergarten up must be a creator; he cannot be an imitator. As the distinguished speaker who just finished addressing you pointed out clearly, the initiative must be there; it is absolutely, always essential, especially in the arts, the initiative must be there, and any child in the primary grades, in the high school grades, in the art school who does the thing as the teacher tells him to do it, is becoming no more than a mechanic; there is no inspiration, no revealment of beauty there; that point is quite obvious.

There will always be artists!

Let us see what the gradual development has been which has brought forth the new initiative into the world of expression today.

At the end of the 19th century we saw upon our own stage marvellous realism accomplished. Through electricity, through the stage manager's and stage painters' craft we experienced the illusions of storms, of floods and winds, subtle moonlight, and dazzling sun, the silent depths of the forest, the tragedy of the desert. Compare the last snow-storm you saw on the stage with the snow storm in "Way Down East" that you saw 15 or 18 years ago, and you will realize how much advance there has been in representing snow storms. You will find today in the New York Hippodrome, "Pinafore" being sung upon a "real" ship that floats upon a "real" body of water. Towering masts, furled sails, ship's lights, the distant shore, rippling waters, bobbing boats, all are there. It is practically the last word in realism.

In literature we know that since the days of George Eliot and Charles Dickens realistic description of all things exhausting the vocabulary of the dictionary; have exhausted all the inner emotions and external experiences of present day mankind. You can scarcely imagine a more complete description of realism than some of the late books of Gilbert Parker, of Hichens, and we have already grown tired of those things. They bore us. We go to a spectacular play. When we come away we realize that we have seen acres of scenery but we wonder what was its use. In trying to find its use novelists and dramatists have tried the "cross-section" of life, revealing without sentimentality, even with brutality, the underworld. It is simply reaction against the clawing sentimentality of excessive emotional realism.

We had in painting in the year 1900, brought to Paris, to the very seat of the artistic, an exhibition so dazzling in its absolute expression of light that even Paris gasped to behold colored mud upon an opaque canvas almost reproducing the dazzling brilliancy of the sun. Light itself had been brought into painting; a great limitation had been conquered.

When we look today at the paintings of John Sargent, our own American, we wonder at the living presence of the beautiful woman, with light in her eyes, a flush in her cheeks, her nostrils dilate, she laughs, she breathes there in the canvas before us.

At the paintings of Benard, the Frenchman, the art student stands aghast and says "What is the use of my painting; I cannot equal this; it would take fifty years to equal the color realism of life that he has put into his canvasses. Why attempt it? I had better do something else."

When we look at the marvellous nudes and cold light of the north that Zorn paints,—when we look at the rushing, running water that Theoulow paints; when we look at the scintillating lights of Gaston La Toucke,—we wonder what there is left for us to do as painters.

In Paris, among the usual hundreds of art students, there are many each year who say: "No use trying to go further"; they become the most tragically discouraged students probably that live, and I am told there were eleven suicides in the Latin quarter last winter. Now, the stronger ones come forward and say: "Why, there is something more to be created; we are living in the 20th century, we do not need to go on with these things of the 19th century; there are a lot of things to do; art is the expression of life; why should we desire to do the things of the past, no matter how fine they may be." Let's try to represent something that shall not be portraits or landscapes, that shall represent the things that people and landscapes accomplish." So they go to work, the revolution is on; and naturally the academicians say: "These things are absolutely impossible; they are forgeries." That is what they said of Whistler, of Wagner, of Bach and Cimibui.

So in Paris today the Secessionist painters go down and rent a shed on the embankment along the Seine, where they may show the red hot brands of their revolutionary works. The leaders among them are profoundly serious, possibly too serious, for they believe they are martyrs, disciples, saviours; and around these leaders immediately swarm all of those who could not do the other things; and they say: "Ho, this is easier; lets go in and help out with this thing." So all of the failures, all of the radicals, all of the charlatans come along and try their hand at this new "easy" thing, which has no standard, and which no one can judge. And so the Independent salons of Paris and Munich have come into existence and are the hot beds of the revolution.

Last year we visited the International exhibit at the Art Institute, or at the Armory in New York. We stood aghast at what we saw. We came out angry; incensed, ready to write to the directors and say to them that they had disregarded the true spirit of art; that it was time for them to close the doors of the place, or at least to keep the children out. Strange to say, the children had a bully good time, and were never once offended, but the grown-ups! went there,—turned their heads, and shut their eyes. We said to one lady: "Madam, were you personally offended at any of these things?" "No, but I knew the effect it would have upon others." Then some went and became sad; came out and said: "What has it come to? Think of art coming to this; to think of anybody believing there is beauty in this." It really is too sad to make fun of. There was one who said: "Why, the whole thing is a joke; the artists are trying to fool us."

But we find in just one year that many of our most distinguished academic painters of America are becoming Cubists, Post-impressionists and Futurists.

In a cultured center of New York is a young woman, a deaf and

dumb artist, who has had very little technical training, but a Western connoisseur who buys Futurists or Ultra-Modern things says: "Why, this Miss Blank is the greatest artist that has ever lived; she has gone beyond anything because her art is the expression of the untrained mind," and then we wonder what in the world is the use of training the mind; better let them go ahead and produce things without training, they will become greater than those who have training. Miss Blank's pictures are now on exhibition in the Milwaukee Art Society's rooms. At least, we may come to this conclusion, that if color is the mission of painting, the Ultra-Modern have found the elemental secret of it, for when we enter the exhibition, upon our word, it makes everything we have seen this year look very tame in color, and surely in present day display there is no timidity in the use of color.

You know, last night, when those ladies in their caricature costumes came down the staircase they were not so startling after all. I saw some in the audience that could well have been in the parade. I see a good many right in this audience now that show more than a bit of the modern spirit, and why not, it is perfectly joyous and courageous. Would that the men had half the courage in what they undertake.

Are we living in the conservative days of book learning? How much exhaustive, studious reading is done today outside of the school? Rather are we sharpening our impressions, sensibilities and emotions. Now, we get a whole history in a set of moving picture films. There seems to be little need of reading the whole history. We get our education in tabloid form just as much as we possibly can today, and the road is shortened, time conserved.

We are living in the modern age of great cities, where buildings are built fifty stories high. We get into an elevator, and "bing" we are at the twentieth floor; step into another and "bing" we are at the fortieth floor; step into another and "bing" we are at the fiftieth floor. Perhaps there will be another building with seventy floors; that may be next year. We can scarcely realize the speed at which we are living. We come up from Chicago over an old pike road, which fifty years ago the first prairie schooner traversed. Now we travel at the rate of seventy miles an hour, eating oysters, a thousand miles away from the sea, from dishes of silver and cut glass. We can address audiences in Indiana, in Illinois, in Wisconsin, in four different counties in five different cities, all in the same day. We know we can communicate with the entire world tonight if we choose. If something very unusual should be happening in China now, it would be in our morning papers. We are living in the great age of universal activity. Each year when we go to European shores we find the European cities are becoming more and more like American cities. I had a photograph not long ago

from Hongkong, China. If it had not been for two little signs on a building in that picture, I would not have known but that it was a street in Brooklyn, New York.

We know that every art in every age has only been true when it expressed that age.

When I hear one of Shoenburg's pieces of modern music, I realize something in them that is far more keenly allied to the spirit of our modern age than anything that has yet been written. What the true value of it is we have no way to measure or judge; all we know is we are excited by the things as we are enthused by very little else.

We have had occasion in the Milwaukee Art Society to see the effect of the painting of the Cubists and Post-impressionists on the children of different grades. Almost without exception they have been delighted. They have stood before the canvasses and have held great discussions over what they saw. One canvas, "The Dance at the Spring"—I asked some of them to explain. One said, "I see two men in armor." Another girl said, "No, I don't see that. I see a man in sorrow." A little chap in the back of the room raised his hand and said: "Mister, I see a lady who has been dancing the tango and those are the motions which she has left." Those youngsters got a great deal more fun, I venture, more satisfaction out of having their imaginations aroused by these than having to be convinced that what they saw were the illusions of real scenery and real faces. One picture by Glazze, a Frenchman, is a jumble of circular, triangular, and cubical forms of three dimensions, in green, white and brown. I asked one little fellow what he saw in that and he said: "I see a village, looking down from a mountain top." Another little fellow said: "No, I think it is a village made with play blocks." I think he was right; "play," I am sure, was in the artist's mind.

Come over and see it, and you will enjoy it. You will find your imagination aroused; find a new field of thought in these things; find in one picture an absolute expression of the tragedy of physical life; in another picture the absolute expression of the joy in physical life, or the beauty and loftiness of the spiritual life, without any representation of anything physical. You should not care a rap what the artist had in mind, simply find out what it puts into your mind. I have said to one cubist artist: "What did you intend when you painted that picture?" He said, "I will say that I do not know." "Did you have any definite idea in mind?" "Most assuredly; I knew where every spot was going to be. It was something that I could not express in words; if I could have expressed it in words, I would not have painted it."

You will find these Post-Impressionists, Cubists and Futurists are not working to any special limitations, with any set formulas; they are

struggling to be absolutely as free in their propaganda as the light and the wind. They say: "Do anything that is sincere, that is not formulated." They say: "Why paint the thing that is being painted by five hundred other artists, something that is simply the echo of a "*school*;" or "cutting after a pattern." There is more genuine initiative, there is more of the genuine modern spirit in the drawings by the primary children out there in your exhibition than there is in the International Exhibition of Painting at the Carnegie Institute at Pittsburg. Preserve this thing; guide this thing; nurture this thing. You who have anything to do with the training of children have the key to the future American Art. Arouse the initiative, give them the foundations, fundamentals, mechanics, grammar, history of art. Teach them to see and to draw, and then let them be *free*.

TEACHING DESIGN IN THE PUBLIC SCHOOLS

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It has been frequently said in substance that we should have two aims in our teaching of design: 1, Appreciation, 2, the development of the creative faculty. The development of the power of appreciation involves discrimination and judgment. It certainly is not a defensible purpose in the teaching of design to develop the appreciation of what is not good, while it may be and is an entirely legitimate purpose to develop such discriminating power, as to enable the pupil to judge what is good and what is bad in design as applied to the things that minister to our esthetic sense and material needs. It would perhaps be well if the high appreciation of what is good in design could be developed without at the same time developing a recognition of what is bad. I sometimes think that those people whose appreciative powers have been most highly developed and whose discriminating powers and judgment lead them to see so much about them that is bad in design, are perhaps a bit unfortunate. Their sensibilities must be constantly shocked by the presence of so much that is atrocious in the wearing apparel of their friends, in the furniture, and decoration of their friends' houses, and public buildings and in the thousand and one things surrounding them in the activities of their daily lives. Perhaps, however, the development of their fine powers of discrimination and appreciation may serve to so concentrate their attention upon the beautiful about them, that the ugly appears only in the margin of their stream of consciousness. The importance of this first function of design, the development of the power of appreciation, cannot be over estimated, and the importance of having this appreciation based on something that is fundamental and lasting is equally true. This raises the question whether there are any fundamental principles formulated, or that can be formulated as the basis for discrimination, judgment and appreciation. One is sometimes inclined to doubt whether there are any such principles when one sees the designs in fabrics, in wearing apparel, in decorations of all sorts which last year were accepted as the correct thing, but which this year are displaced by others entirely different. That they are different does not imply that they are bad, but that last year's designs are no longer appreciated and that this year's designs will soon be in the same category and that ten years from now, last year's designs will again be appreciated, presents a somewhat puzzling situation. Why do most of us speak of the

designs appearing in different varieties of dress goods, in complete garments, in wall decorations and furniture as being "good, beautiful, charming, delightful, perfectly lovely, exquisite?" Is it because we know that these terms fit the situation, is it that we have no basic knowledge that enables us to discriminate between what is good and what is bad, or if we have that knowledge, is it because we have not exercised it, or is it because these things are the style; because they are the latest thing in their respective fields, because they are exclusive and only available for those with a long purse. Or is the situation this: we accept these things because they are offered in the shops, because other people accept them and we wish to be like other people. Is a design good in wall paper because everybody is buying it, and is a design good in a hat because everybody is wearing it, in a new dance because everybody is dancing it, in a new style of walk because everybody is doing it: if so then when everybody begins to do something different, the design ceases to be good.

It is an interesting question as to how far design in structure and ornament is the result of demand on the part of the public, or how far design is influenced by the taste of the public. I believe that a careful survey of the situation will disclose the fact that design as it enters into manufactured articles, in structure and ornament is not influenced very largely by the taste of the people who are in the market for manufactured articles or structural or ornamental effects. It cannot be said that good or bad design is determined by expense entirely. The design involved in the structure of a table may depend somewhat upon the amount of time, material and labor put into the table, and yet, there are many elements even in the design of the table which are not determined in any sense whatever by the element of cost. It is unquestionably true that if the buyers' appreciation of what is good and what is bad in design were fully developed and if they allowed that appreciation to control their choice in purchases, it would have a very marked effect in reducing the demand for those things embodying bad design. This being so, it emphasizes the importance of the first purpose in teaching design; namely, the development of the power of appreciation. It will probably be accepted as a truism that in every one the power of appreciation of what is good in design may be very much developed. That development may be begun at a very early period in a child's life, and if the right attitude of mind is secured, may continue until a late period in life. I believe it is equally true that the development of creative faculty is a much more difficult undertaking, that the majority of people have not the native endowment necessary for the development of the creative faculty in design to any point where it has any great value for the individual or for the community. Man is an imitative animal. The people who strike out new lines of thought or action, invent new processes, the real creators of something new, are few and far

between. They are not educated to order. They have that within them which is bound to express itself. Education may aid in securing that expression early or in a more perfect form than would be possible without education, but sometimes education acts as a deterrent rather than as a stimulant.

If there were a much larger number of people possessing the creative faculty in any given field of human endeavor, whether in that of design or elsewhere, it is not certain that the demand for their labors would be sufficiently great to encourage them to remain active in that particular field. Good design in a given fabric, in wall paper, in a rug, or in any one of a thousand things in common use will serve the purpose for a million people. A single designer will furnish the new designs needed in a manufacturing establishment employing hundreds of men and the products of this factory will meet the demands of thousands of buyers.

There may be people who can reach that stage of development which impels them to value design for design's sake, but it is not the function of the public schools to teach design except for the power of applying it, or for appreciating it when applied by others. It is worth while to consider the difference in the two purposes in teaching design and how far the difference in aim involves a difference in method. It appears to me from my observation and study that the method generally employed in teaching design in so far as it is correct at all, is the method deemed necessary for accomplishing the second purpose, that of developing the creative faculty.

In order that one may work out an original design it is essential that there should be in the mind of the worker clear percepts of the elements involved and of the possibilities of their combination in accordance with correct principles, and added to this there must be skill of hand in expressing these mental images. The one is knowing, the other doing. I am not a teacher of design, but one does not need to be a teacher of that particular subject to know that the demands so often made upon the pupil to create something original, are absurd for the reason that the essential elements of knowledge, adequate mental images are not present. The pupil does not have the mental images of the right kind in sufficient number so as to create anything worth while. I think the procedure in the commercial world demonstrates this very clearly. The manufacturers of wall paper in beginning their work of securing designs for wall paper for the next season's market, might, it would seem if we are to judge from the demands which many a teacher makes upon her pupils, say to his designers, "Create the designs for new patterns of wall paper needed for the next season's trade." If the designers have been making wall paper designs for years, it would seem that their minds might be stored with the necessary elements of knowledge that would enable them to create

whatever might be desired in the way of something new; but what the manufacturers do is to gather up from all over the world the very latest designs in wall paper that he can secure and put them before his designers for study, analyzing, discriminating and experimenting before they are called upon to create.

The furniture manufacturer proceeds in the same way. He makes available for his designers the new and novel in furniture designs in order to add to their stock of mental images to be drawn upon in creating new designs for his factory. Might not the teacher who is proceeding upon the assumption that he is trying to teach people how to make designs, learn from the practical men of the world something that they can utilize in dealing with their pupils? In other words, might there not be a much larger portion of time spent in studying applied designs? I am not claiming that this kind of work should entirely take the place of the imitative and constructive work of pupils, but that it should be furnished in a much larger degree than it generally is, in order to store the pupil's mind with a larger mass of the material essential in design. I would raise the further question as to whether larger results cannot be secured by spending less time in just making designs, and spending more time in designing something to be applied for a definite purpose and for a purpose that has some utility. I recognize that there are certain fundamental principles by which it is claimed a good design must be constructed and by which it is to be judged; but these fundamental principles may be taught as well, and I think better, when the design to be created is for definite application in some particular field and when accompanying this effort of creation or preceding it, there is an extended study of other designs already in existence applicable in the same field. I believe this is the mode of procedure in schools of applied design where the pupil is to develop the creative power as applied to meet some particular demand.

For years there has been an effort to secure people who are teachers of art who can apply their knowledge of design in the field of manual training and domestic art and yet most of them have been utterly helpless in trying to meet this demand. The persistence of the demand, however, is slowly working some change in conditions, a change for the better. It may be said that these teachers have not had sufficient instruction in design, but it might better be said that their instruction in design has not been of the right kind. It has led nowhere. It is related to nothing useful.

We must remember that there are other things than design to be taught in the schools, more things than ever before, and that the demand in this field as well as in every other is that the essentials shall be taught by such methods as will produce the most practical results in the least time, and that the non-essentials in matter and the faulty in method shall

be eliminated. Let us not make the mistake here that we have been making in the general development of our educational system, namely, that of thinking that a course in design is for the ten percent of the pupils who find their way into the high school, and that it may be laid out with reference to four years' work, at least, beyond the elementary schools in order to secure something worth while. If nothing can be done in the way of developing the creative faculty in the field of design during the elementary school period, then abandon the effort. If anything can be done, determine whether it is worth doing, the value it will be to the pupils taught, whether the value is sufficient to warrant the time taken and the effort made, and expense involved. If it is not, eliminate it. If it is, we must be prepared to demonstrate it, not by mushy sentimentalism or art jargon that nobody understands, but by good reasons and arguments expressed in plain English that everyday people can understand and by practical results on the part of the pupils.

Whatever may be the conclusion reached with reference to the possibilities of instruction in design for the development of the creative faculty, there is no chance for argument on the proposition that the first purpose in teaching design, the development of the power of appreciation, has a value for every individual and since this power of appreciation does not depend entirely, or even to any considerable extent, upon the power to create, the question arises as to difference in method of procedure when this purpose is a dominant one. How far may the same mode of procedure be employed that is employed, to develop the creative faculty? The answer to this question does not settle the question of the wisdom in so proceeding.

No one will question the value of a certain amount of constructive work in producing a design that may be seen and studied by the individual and by others, may be used for comparison, and that may embody the learner's knowledge of the principles of correct design and their application in design; but we must keep in mind that with a knowledge of these elementary principles, the thing that is imperatively needed for the development of appreciation, is *knowing* rather than *doing*. Knowing and doing are essential for the development of the creative faculty because it expresses itself in doing, based upon right knowledge of what is to be done, but *doing* is essential to only a very limited extent in the development of the power of appreciation. We often hear the statement, "We learn to do by doing," and then we hear it modified into, "We learn to know by doing," and both statements are correct within certain limitations. We learn to do the thing we are doing provided we ultimately do it well, but we are not learning to do something else. We learn to know by doing provided we finally discover how to do the thing well and succeed in doing it well, but our knowing is that which is essential for the

doing and not that which is essential for something else. We may run a parallel to this in the working of a long list of arithmetical problems. Here two things are essential, the knowledge of how to work the problems and the application of the necessary operations in working them. The determination of how, involves the reasoning power, while the application of the operations, involves the memory only. The one is developing mental power, the other may probably develop skill in mechanical operations, but even that is doubtful. If the pupil were asked to present the steps in the reasoning processes in the solution of the problem, eliminating all operations, and using symbols for the results, assuming the operations to have been performed, in a given period he can get twenty times as much training in reasoning or knowing, as he gets when every step of the reasoning process is to be followed by a long and tedious operation involving no reason.

The study of design for purpose of appreciation, involves, as I have already said, a certain elementary knowledge of the principles of design and of their application. Beyond that, the thing that is essential in that knowing and feeling which shall result in appreciation; is analysis, discrimination, and judgment, growing out of a study of designs, not that he has made, but that others have made and that he finds applied all about him. That this is true is shown by the fact that the child who comes from a home of refinement and culture where artistic design is apparent at every turn, who has lived in this atmosphere, has unconsciously learned to appreciate the good. He may not be conscious of analysis and discrimination, but the moment he sees something outside his own home which jars upon his sensibilities because of its lack in design, this jarring comes as a result of the discriminating process whether he knows it or not.

It is said that the street gamins in Rome have a fine artistic sense developed. This is not entirely a matter of heredity, but a matter of environment. Their appreciation of what is good in architecture, painting and sculpture, grows out of the fact that they have lived in the midst of artistic creations of the highest order. They have been surrounded by them, enveloped in an artistic atmosphere, and unconsciously have developed the power of appreciation. We cannot furnish for all pupils the environment of the cultured and artistic home, nor the art treasures of ancient Rome, but we can do something with these pupils to quicken their perceptive powers, create good mental standards and develop their power of discrimination and judgment in the field of design.

You may say that this plan involves large expenditures for illustrative material and that this fact precludes the possibility of procedure along this line. The claim is absurd, has no foundation, in fact, whatever. When awake the child can go nowhere and escape the presence of applied design. Why not study the design of things that are about him, the things,

of his own environment, for the purpose that he may enjoy that which is good, create a demand for that which is better, and utilize as far as possible the best available.

For a boy, the design of the shoes that he wears, the hat upon his head, the figure in the material in his coat. For the girl, the design in the dress pattern, the design of the dress itself, the design in the trimming, and the shape of the hat, furnish very practical illustrations. Every article of furniture in the home, the schoolroom or in the shop, furnishes illustrations. The wall coverings in the home, the curtains, the portieres, the rugs upon the floor, the paneling of the wall, the table from which he eats, the silverware or nickelware, the china, iron, stone or haviland upon the table, the very arrangement of the table, utensils and the food, the moulding of picture frames, all may be utilized for the purpose of studying what is good in design and why it is good.

A very practical illustration can be given in this field from a very homely and common place line of work. I have seen a class of boys who were learning bricklaying, and who, until they began studying this subject had never seen in a brick wall anything except difference in color, one was made of white brick, another of red and another of some other color. A very brief experience in the laying up of walls, in the possibility of the different effects by the different arrangement of stretchers and headers, and a study of cuts illustrating different kinds of wall construction, coupled by the suggestions of the teacher which lead them to examine, analyze and discriminate as to the kinds of construction and arrangement in brick buildings around them, developed an interest in this study that lead them to forget the color of the wall, and look for the other elements of utility and beauty in construction. These boys will continue to see new beauties in brick walls, will by this discriminating power form judgments showing a very rapid development of the power of appreciation of what is good in design as applied to bricklaying.

A girl may study design for years without ever appreciating the fact that it has any relation to her own clothing. She need not have spent months and years in laboriously creating designs applicable to no purpose, in order to begin the study of what is good in the design of decorative effect upon a shirtwaist. I can conceive how a skillful teacher who is really in earnest in developinng this power of appreciation, can awaken a deep interest in a class of girls, by studying the decorative designs upon their own shirtwaists, by inducing them to make a collection of such designs, as they appear in Sunday newspapers and trade catalogs, in fashion magazines and women's periodicals. Some of these designs will be bad. So much the better. It affords opportunity for the play of the discriminating faculty for bringing out the reason why they are bad and why others are good, and a very limited amount of technique will perhaps

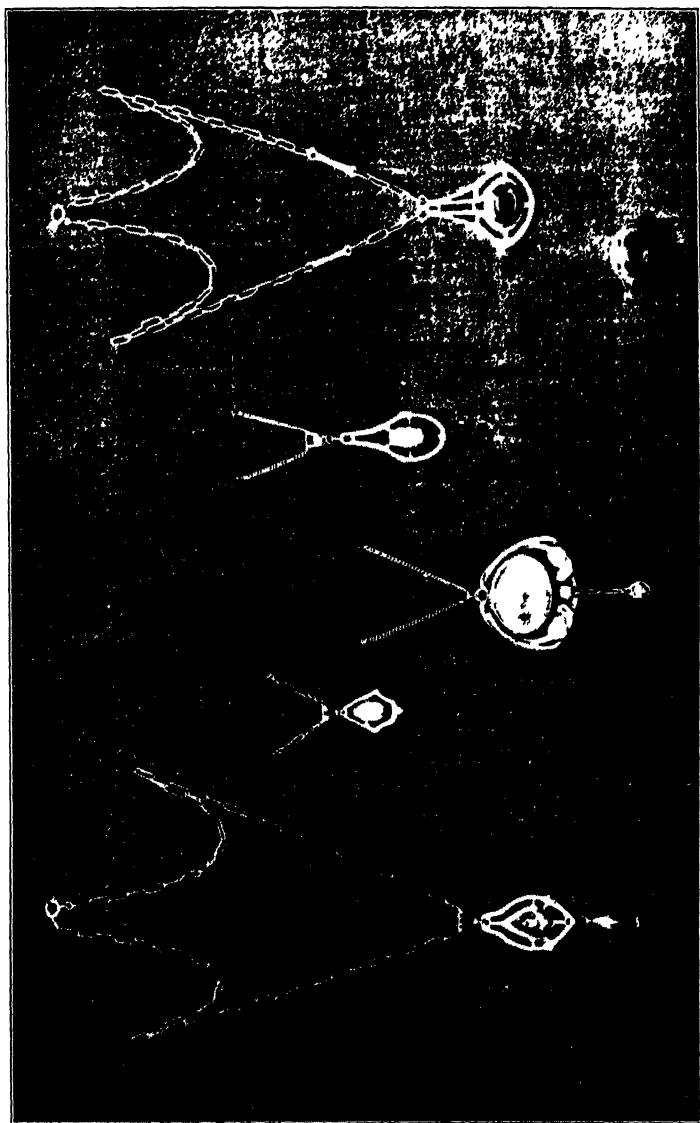
enable some of the creative geniuses of the class to do unexpected work in bringing out original designs. But no matter whether they make original designs or not, for the purpose of developing the power of appreciation. The study of wall coverings does not need a collection of rare old tapestries worth thousands of dollars. Any dealer in wall paper can furnish, and will be glad to furnish, samples that may be used for study. Every papered room in the home furnishes another illustration and the same is true of every other article of furnishing in the home, with reference either to ornament or use.

In high school classes we occasionally see pupils working for day making water color sketches showing color effects in a library, dining room or other room in the house, and this work may perhaps be fully justified provided it is not continued too long; but the amount of material available today showing all sorts of colored effects and combinations in materials that may be put before the class for study, makes it seem a waste of time for the pupils to attempt to produce, poorly as they are likely to do, similar effects. They are not being trained to become house decorators. They should be trained to appreciate what is good in decoration and to know why it is good.

The boy who is to design a table has other problems than that of ornamentation. He needs to study tables rather than designs, and he studies tables to study the principles of design as applied in these tables. Correct design must involve proportion, provision for strength and durability. This knowledge comes, not from a study of pure designs, but from a study of applied design as he must study it where it is applied. He can study the tables in the school room, the tables at home, the tables in the furniture store, tables wherever he can find them, and if in his drawing he has not been so much concerned with art for art's sake that he has no time to learn to make a simple freehand sketch, he can use his ability to sketch, to bring the results of his study to the class and show these results to others.

A few years ago I observed in the Manhattan Trade School for Girl designs of hats and dresses in color. They were creditable, they showed some appreciation. I asked the teacher what instruction these pupils had had in drawing and design before coming to the school. She gave a look that seemed to express her pity for one that should be so ignorant as to ask such a question, and said, "Why, these girls have never had a particle of drawing in their lives." I said, "How do you get these results?" She answered, "By setting them to work on these particular problems and by showing them good designs and studying them with them." I said, "Do you not find it necessary to give them a somewhat extended course in pure design and in drawing and in the use of colors before you undertake this work?" Again that pitying look. "Why, she said, 'If we were to do

that they would be gone from us before we began to do anything they need to have done for them." Their technique probably would not be satisfactory to the skilled artist or teacher of pure design, but it is adequate for their purpose and increases their earning capacity and serves to interest them and hold them in school until they have developed a degree of efficiency that commands a reasonable wage in the labor market. For the ninety per cent of the children in the public schools, design, if it is to be of any value, must be along the lines of appreciation, and if instead of working laboriously for years in attempting to develop a creative faculty, which cannot be developed in most of them to any considerable extent, we should recognize that fact and devote our services intelligently and persistently to the development of the power of appreciation, we should do much of value for them and quite probably something to develop a better art atmosphere.



Jewelry Made by High School Students. Portland, Oregon

STRIKING A BALANCE BETWEEN THEORY AND PRACTICE IN THE FINE ARTS

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It is most interesting and most remarkable to note that in any discussion of art, one of the most fundamental expressions of civilization, that we must begin with a definition of art. We are even wondering and speculating on the recognition of the meaning in the so-called art of the future. We conceive that possibly there might be some meaningful import in what seems to us the senseless scrawl of an eccentric mind, and yet the interpretation of the well doing that lies all about us is constantly necessary.

I will defy any one to talk sensibly of art without beginning with a definition. This is in part because art is universal, but it is more particularly because of a general indifference to the finer things of life in preference to the purely physical things. I would define the art that interests us tonight as the expression of beauty through manual effort. A thing spoken of as *well done* must be beautiful as well as useful. Ill-devised things can not be beautiful.

My subject at first glance reads a little like a problem in accountancy. I can not presume to tell just when theory leaves off and practice begins in art. Just where and how in art, inspiration, crystalizes into reality. Just what laws, rules, and formulae, if any, applied to concrete matter will produce a work of art, and just how to apply those rules to get results. If I knew these things I should hesitate to tell them, because the art so produced today would be commonplace tomorrow, and new rules and principles would be needed. No! Our art and the teaching of it is a continual progression. In the way of leading us into profitable discussion, the committee suggested a line of thought by stating that "Miss Blank (an art teacher) says, that she has found the secret of past failure and future success in *absolutely ignoring* principles in art instruction, and that Mr. Blank (presumably a manual training teacher) says, that art instruction is a matter of the intelligent applications of principles, and formulae." It is unfortunate that this pair could not have appeared here in debate. We have all heard, and perhaps have seen much of art in the attic with a sky light looking to heaven for inspiration. We have all

heard and seen much of manual training in the basement engaged in practical, sordid occupations of industrial precision.

These two interests have been wedded in this Association for many years. A very few of us remember the wedding day. Some of us have even thought we discerned a certain aloofness between the contracting parties at times. Some have even expressed a doubt as to the outcome of such a union. I do not understand on what ground such pessimism is warranted. Interests were never more supplementary than those of art and manual training, and when two contracting parties like these combine their interests and forces manual arts should result.

There has recently been a waif left on the doorstep of manual training and art. This is not remarkable in school history. Art and manual training were themselves waifs left on the doorsteps of education for adoption. They were not born of education but were born of necessity and adopted by education.

It is a safe assumption that just as art and manual training were adopted and reared by education, so lusty little vocation will be adopted and reared by art and manual training, and just as art and manual training have broadened and enriched education so will vocation broaden and enrich the industrial arts.

Manual art has been defined broadly as the best way of doing things. May she not then be the foster mother of instruction that teaches the best way to do things and is not vocation the best way to do the things that all people must do? In no subject of the school curriculum has there been more radical change of method than in art education. It began with drawing. The first emphasis was put upon the technique and the inevitable formulation of the work reduced it to a mechanical geometrical process. From that stage it has gone first in one direction toward expression, through drawing, then back toward form through construction, and now includes both expression and construction.

The fine and industrial arts in education are now a group of exercises and methods not thoroughly formulated but aimed toward aesthetical appreciation on the one hand, and a degree of skill in execution limited by school conditions on the other hand. This group of exercises are still poorly organized. These arts do not fit well into the school organization. They are not given adequate time. Proper illustrative material and equipment for work in aesthetical lines are yet to be acquired in a majority of schools. More could be done however with the present equipment if school authorities and teachers understood better the aims of art in education and were better trained to realize them. The appreciation of beauty for its cultural effect is one great aim which I am sure we will all realize but which we do not always hold in mind during the teaching process. The development of

technical skill and understanding is another aim which we fail in because of lack of time and because we as teachers do not always possess it ourselves. Can we draw? Can we model? Can we use color effectively? Can we produce tones of related strength? Can we do the things we expect of our pupils? I realize that we may not produce workers of art such as those we hope to inspire appreciation for, but should we not be able to demonstrate any technical process we wish our pupils to perform? Should we not be able to express ideas through drawing?

Now! the purpose of these two divisions of work,—art and manual training,—are not identical. It is idle to claim that they are. A study of art develops more of the liberal and cultural phases of education than does manual training. Manual training is more specific and technical than art training, yet they are far from being so distinct in purpose as to warrant such distinction in method as the elimination of all principles on Miss Blank's part, and the exclusive use of them by Mr. Blank.

Miss Blank (the art teacher) and Mr. Blank (the manual training teacher) differ essentially in aim. Their extreme differences in method is the result of this difference in aim.

Miss Blank is a disciple of content, emotion and expression in art. She realizes that no student may design without pre-conception. Mr. Blank is a disciple of form in construction. Drawing, modeling, painting, manual training, etc., will not make for aesthetical taste and judgment unless they are made the means of expressing a content of mind which reflects a conviction of purpose and understanding.

We must recognize content, as well as *form* and *expression* in any well rounded course of instruction. The *content* of a school subject is embodied in its relation to and its result upon humanity. Its history, traditions, and accomplishments are its content. Such a *content* has not been developed for the manual arts as a school subject as it has been developed for literature and history, while art instruction has dealt largely with form and is limited in expression. Art cannot be appreciated until thought is given to the content of it.

The mere application of principles for the production of beautiful things is ineffective because principles when applied to concrete matter, limit the most interesting and valuable expression of art. So! devoid of content, our art instruction has emphasized and is still emphasizing form while expression is lacking.

Why is it that we like a particular art of a particular people? Is it not because it expresses a purpose and creative instinct of that people? Why can we not imitate it successfully and produce more art of the same sort? Is it not because we do not express our own purpose and creative instinct when we copy the work of others as when we work under our own purpose and instinct? Such plagiarism is never successful in art.

No! the purposes of art and manual training in our school are not identical, *excepting in the element of art*. Manual training must include art or it becomes little more than trade practice.

Indeed art seems so fundamental to school training that there is hardly a school subject that does not partake of it.

This is because it is fundamental to social progression. May we not even hope for a time when the so-called art teacher may become an extinct species? May we not hope for a time when the burdens of the art teacher will be taken up in due proportion and with understanding by the teacher of domestic accomplishment; social accomplishment; civic accomplishment and commercial accomplishment? You say *cultural* accomplishment remains? No! not even this remains, for is it not embodied in the expression of domestic, social, and industrial activities?

Principles in the composition of forms to produce a work of art are inevitable and necessary, but like rules and principles in language they serve us best when they guide subconsciously the mind that has made them a part of its own experience and which seeks to express itself. It is doubtful if they should ever be presented by the teacher verbatim as rules and principles. It is also doubtful if adequate results can be obtained by art instruction, until we have developed and used a means of expression, and until we can place our pupils under the influence of seeing and appreciating the best that the world has offered in art.

As teachers we must inform, but we must also inspire. We suspicion Miss Blank would inspire without adequate information. We suspicion that Mr. Blank would inform and not inspire. Let us note in a more particular way just what we mean by a *principle* of art.

A scientist once asked me a very pointed question. He said, "I have read that art of the past, unlike science, has left no laws as a heritage to the present generation. Do you believe it?" I answered rather thoughtlessly, "No! I do not." Art of the past has left definite laws on which the art of the present is based. And then he asked me to name such a law, and I answered still thoughtlessly, "Unity." It was very fortunate for me that the man was a scientist and not an artist or a philosopher.

Let us see if unity is a law of art. A *law* or rule is something to be irrevocably followed to a conclusive end.

No one can consistently question a law. He must obey a law blindly. Law allows of no conditions. It is conclusive.

Let us assume that we have a multitude of diverse elements and colors, and our scientific friend says, "There now, Mr. Artist! go to and produce a work of art by your law of unity."

Miss Blank probably takes unity as a principle for granted. Most of us do. Mr. Blank (dealing with principles) considers unity as almost adequate. If a project holds together in design and does the work it is

designed for, it may be adequate in Mr. Blank's mind. Miss Blank pronounces it ugly. She is the art teacher and unity is not adequate. She holds ideals of beauty as independent of use. We certainly agree with Miss Blank that beauty is essential. There must certainly be variety as well as unity in our design. There must not only be variety but there may be as much variety in the product of a class as there is variety of mind in the class, and a belief in individuality precludes the possibility of two minds just alike.

How may we secure variety with unity? Again we have a principle that applies. Miss Blank would ignore it as a principle, yet again we must give her credit for taking it for granted. She could not teach otherwise. The principle of harmony enters in.

Harmony between the several parts of a design may be effected by like dimensions, tones, contours, colors, texture, etc. Surely we all know this! Why not teach it? We do! It has been taught by nature since the world began. Mr. Blank thinks this is surely adequate. To him if a design shows unity with variety and harmony it must certainly be adequate. Miss Blank still pronounces it inadequate. When asked why? she says, "Well, it does not express individuality." She is right! It does not! It looks as if made from a recipe. It is commonplace, most of our manual training work is. Perhaps Mr. Blank dictated it, as he would a letter to a stenographer, or perhaps he found it in an exhibition, and presented it to his class with the assurance that it was good because it came from an authority. (It has been said that manual training teachers do such things.) I am inclined to believe that they do, or else that there is a wonderful coincidence in the resemblance of exhibitions of manual training work done in different places and by different pupils. These models often have unity with variety and harmony, but do they show individuality?

I am well aware that some of the manual training teachers and even some of the art teachers present are now saying to themselves, "Oh, yes! It is well enough to say that there should be no two products alike in the work of a class in the manual arts, but that man never gave a class of 40 children a school exercise in twenty minutes or he would know that 40 different results are impossible. I am not ready to admit that forty different results are impossible. I do assert that in so far as they are *unlike* those results suggest individual thought and effort. I do assert that in so far as they are *alike* they suggest imitation. I know and you know that imitation and emulation are valuable means in the educational process. We must use them. But we must not use them to the exclusion of that precious development of individual thought and expression, and the art interest in our manual arts is represented by differences between the work produced rather than by sameness in the work produced.

Professional workers usually approach the arrangement of a design by one of two paths, and perhaps we can gather a little help from the professional workers in our field of work.

First class designers collect all of the conditions and relations and data possible in relation to a problem, and then they arrive at a solution by elimination of the unfit. The remainder is the solution of the problem. One designer of some of the notable and financially successful office buildings in this country works in just this way. In the formative stage of his design he is not too proud to receive suggestions from the lowliest draughtsman in the office as to the physical necessities of the problem. This process goes on for some time. Many plans are made only to be discarded because they do not quite fit the physical needs of the problem. These physical needs are studied until there seems to be no possible contingency that has not been considered. The aesthetical needs are then considered with equal care, and according to formulated principles of design, but relative to the physical needs. Many more sketches are made of possible solutions with regard to appearance, but always strictly under the conditions of physical purpose. This is a safe, logical method of design, is it not? Mr. Blank approves it. Miss Blank is still in doubt. There is little inspiration evident in such a process. There is much of reason and calculation in it.

A second class of designers work from aesthetical impression from the start. I have in mind such an artist. He is responsible for some of the most unique architectural designs produced in America. One little remote town in which stands a monument to his genius has become the mecca of those interested in architectural design, and this building has veritably put the town on the map. His work is well suited to its physical purpose. It is not a freak of the imagination, yet it is dominantly unique and personal in effect. Individuality is stamped all over this man's work.

This second class of designers draw in something first which responds to a preconception which they hold in mind. They do not develop the design from the physical necessities, but they adapt the physical necessities to a preconception. This is a masterful thing to do. It is the ideal process which few artists in their lives are able to reach. Miss Blank is enthusiastic about it. All of her art training and all of her ambitions point to the time when she and her pupils can do this thing which the genius of the world has done. To dream dreams is one thing. To make physical conditions apply to dreams without a loss of ideality is quite another thing. Such genius is as stubborn as it is rare. If it was not it would perish from the face of the earth and that would be a great calamity. Miss Blank may never hope to find such genius in any considerable number of her pupils. In the meantime she must do the best

she can with all that comes to her. It is evident however that the art education of America must have the influence of this method in its instruction.

Miss Blank and Mr. Blank have not reached a high degree of efficiency in their work as yet. Extreme critics have pronounced Miss Blank as impractical, and school boards have even cast her work out of the curriculum in some communities. Mr. Blank has been censured by one class of critics as inartistic, and by another class of critics as impractical. I believe that the best of the two methods of procedure by these two kinds of professional designers have not been utilized by teachers of the industrial arts, and that the coveted balance between theory and practice lies between them.

In the first place it has been noted that the one designer first collected all of the data, conditions, and needs of the problem. Is this commonly done in our school work? Mr. Blank does sometimes attempt it. A teacher of manual arts recently stated that even after one of his boys had made a good chair he visited the home of the boy and found that the chair had been put in the attic because, as the parents told him, it did not match up with the other furniture of the house in finish or style. Is it too much to ask that projects in manual training not only serve their general purpose, but that they be designed for a particular time and place, as well as a general purpose? Are not the products of industry designed for a particular time, place, and purpose? If they were not they would not sell. A study of the time and place, as well as detached fitness of purpose is necessary in school work. Indeed this study is essential to the specific value of manual training. The shop not only works for the market, it creates the market. If manual arts in the common schools do not direct and even lead the industry of the country by formulating standards of taste and technique, then the industries will continue to exploit the people as they do at present by creating new and eccentric styles to sell more goods than the people need. This is not an extreme statement of present conditions. Do manufactured goods bought on the market by individuals wear out before they go out of style? A history of the fashions of the 20th century published in the next century will be a large volume indeed. What is the criterion of excellence? Certainly not the whimsical style inaugurated by the industries to sell goods. It is one great obligation of art in the schools to develop a taste that will standardize style. It is the business of the school shop to foresee the disposal and use of every piece of work produced in the shop. A final use for a model in school should be assumed, before the model is designed, for the sake of the effect upon instruction as well as for aesthetical effect.

In the second place it was noted that the professional designer drew in something first which was preconceived. How many of our pupils in

manual training precede execution by sketches? But says Mr. Blank they cannot draw well enough to illustrate ideas. This is but a confession of weakness. I have even heard him ungallantly insinuate that it was Miss Blank's business to teach free-hand drawing. Mr. Blank laments the fact that he himself cannot draw free-hand, because as he says I have had no art training. Mr. Blank should be reared with a pencil in his hand. When an idea comes to him, or is presented to him, he should instinctively use that pencil. It is but a sign of an adequate manual art teacher. If he has not been so reared he should proceed at once to cultivate the habit. He is teaching the expression of an impression in his work quite as much as is Miss Blank, and expression of impressions cannot be taught well without a means of expression leading up to final execution. Freehand drawing properly taught and used means a sense of the elements of design. Freehand drawing should be taught to cultivate a conception of mass, proportion, and related parts. No school pupils can preconceive a finished design (as a master), but through drawing they can express a conception and develop it, and without freehand drawing they are dependent upon the designs of others, or must make needless mistakes in the materials themselves.

Freehand drawing has been inadequately taught and used in our American schools. It is one of the most direct and possible approaches to design through leading pupils to see and think in the terms of design. Just now we are having much of design by principles conceived as rules, and drawing is tabooed. The two are inseparable in the production of a design, or of an adequate conception of art in design.

Granting that in a balance between theory and practice we may assemble conditions and study our conceptions more thoroughly. How may we use accepted principles? No principle of art or construction is established for all conditions. Principles are but theories that have stood the test of continuous experiment, and have apparently qualified their use within certain limits, and under certain conditions.

One pedagogical theory that has become a principle with experienced teachers is that the child through imitation at first and reason afterwards experiences that which he knows, and only knows that which he experiences. There is little of value in art instruction that dictates a line here and a spot there according to rule or principle. The child must be led by the teacher to rediscover rules and principles through imitation and reason of his own personal volition. This is why the teacher is the greatest factor in the school equipment, and it is also the reason why in the formulation of aesthetical judgment the teacher should have an equipment with which he can influence the child to experience the best of design that the world has produced.

We have heard very much of late to the effect that the first business

of the school was to teach a boy to make a living. This assertion has been repeated lately by thousands of people, including the law makers and laymen. Miss Blank says with equal conviction that it is but a poor civilization that begins or ends with teaching a boy to make a living. The boy needs inspiration and appreciation to live as much as he needs food and shelter. The savage has food and shelter. The schools must lead to appreciation as well as to manual skill. But how? Through rules, principles and formulae. How does the artist acquire his appreciation? Probably through two general sources: first, through attempts to execute visual impressions in various mediums, not always successfully,—drawing, painting, and modeling; second, through seeing well designed and well executed attempts of others. Could the artist execute a work of art without these experiences, and the principles and formulae that guide them? Decidedly no! Art is the most finely organized of man's productions. To assume that art is unregulated or ungoverned by principle, is to assume that it is accidental, like Topsy (just grown), or still worse like Topsy turvy. It is anything but this. Art is the extreme contrast of accident. It is just the right thing in the right place to produce an exact result. It is the product of the finest discrimination, the most thoughtful effort, the most painstaking and continuous industry of which man is capable. As teachers of art we must never conduce to a prevalent impression that art is the product of license or accident. Contrary to a common statement art never broke an established law or rule. Because there are no laws and rules for art. Art teaching is comparable to moral teaching. Civic laws are made and posted for people who need them, and most people do need them. Aesthetical principles are formulated on the evidence of existing art productions, and most people need *them*. They serve as guides along the way to success. They may not be taught verbatim. They should not be so taught. There is little virtue in committing rules verbatim. The virtue is in their appreciation through execution. Here a little, there a little the code of aesthetics should be realized through thoughtful experiment. To know principle is not a guarantee of goodness, but ignorance of it excuses no one.

Unity is the great principle of art in distinction to science. Science analyzes the material things of the universe into components. Art brings the things of universe conception together to express an idea. Art is therefore no less mental than science, but it has the reverse purpose of bringing together various elements to express unity of thought rather than to separate these elements and treat with them in individual distinction.

Now this unifying process of art is governed by general necessities. It may be governed by many necessities, but three such necessities are commonly emphasized as governing the development of an idea in art. These three principles or necessities are: first, the necessity of expressing

unity by leading the eye from part to part. Unity gained by static force cannot be artistic. A target is unity with no motion or movement of interest. We must concede that any creation of the mind must be more than a target of impression to lay claim to artistic value. A second necessity of unity is balance. Balance is but the adjusted emphasis of the parts of a design to effect unity with variety and interest. There must be rhythm, harmony, and balance to modify unity in any work of art, and they in turn must be modified. So with each and all of accepted principles of design. They are inter-dependent, and their effective use lies in the thoughtful discrimination between conditions.

Educational process has ever sought to formulate knowledge so that it can be imparted by the teacher, acted upon by the pupil, and the result be stamped Q.E.D. We all need such discipline. Our pupils need it. Without it we are visionary and ineffective. But we may never hope to formulate principles of design to a point that they become rules for the production of beauty.

There have been various methods of teaching design presented to art teachers of recent years. One presumes to cultivate taste by deliberate and sequential attempts to produce abstract beauty. In this method literary meaning or constructive form is not considered. A series of exercises are suggested in the division of spaces by lines, tones, and color. All principles are tabooed, and the teacher is the judge of excellence with no reason given. It is presumed that by this process taste is developed for beautiful arrangement, and that beautiful arrangement is the measure of aesthetical excellence. This method has been adopted by some teachers of excellent taste, and has no doubt resulted in attention to abstract arrangement reflecting the taste of the teacher. One weakness of the method lies in the lack of teachers whose judgment can be accepted as a criterion of abstract beauty. Another weakness in the absolute dependence of the children upon the teacher's judgment, and also on the disassociation of meaning and construction from design. Can children think in terms of abstract form? Psychological experts tell us that a shape that approaches a natural form arouses first of all a conception of the natural form in the mind of the child. I should consider it a hopeless task to hold normal pupils to exercises in space division with no more incentive than the production of an abstract design which would meet with the teacher's approval. Granting that the teacher's judgment is excellent, the success of this method must depend on a prolonged series of such attempts. In any case it does not teach the relations of meaning in design. A good picture does not look as well wrong side up as right side up. The natural things are the things of common experience in life, and a method of teaching by abstract forms falls short of adequate art instruction. However, some teachers may use it with apparent success in the production of pleasing abstract pattern.

A second method of design which has been presented in form for school instruction and is therefore presumably adapted to school conditions, formulates all design under specific principles of arrangement according to the elements used in the design. Balance, rhythm, and harmony are defined as principles, and the need of these principles in design are satisfied by the adjustment of lines, tones and shapes to secure beauty. This is a logical analysis of pattern which has resulted in a very great improvement in our school design *limited to pattern*. Our exhibitions are full of it. A third method of design has supplemented this with principles of construction and constructive design. The results of these two methods as independent are not satisfactory in our school work. The reason is evident. Design ceased to become abstract when applied and *all design is applied* to some purpose.

A method of teaching art in school which is based upon a theory of abstract beauty cannot be made to connect up with the experiences of life as all school subjects must be connected. Art is an expression through forms in the concrete. Adjustments of concrete form may be made beautiful, and they are only beautiful when they are useful. The influence of industrial work on art education will be to bring all school effort in art education to a study of the adjustment of form for use with beauty, which is itself an indispensable element and a useful one.

Under various names, principles have been emphasized throughout the history of art. They are not new except in name. The formulation of these principles have emphasized the conceptions of form in design, and all teachers should be informed of them. Shall we teach them as principles? Under school conditions we must lead to the conceptions which they emphasize as fundamental. We must have terms for effects and these design terms seem good. We must not allow stated principles to take the place of individual analysis on the part of the pupil. They are negative rather than positive. Design cannot be built upon principles, but principles can be used to inspire thoughtful design.

There has of late years been a reaction against the naturalistic conception in graphical art. It has been conceived that beauty lies rather in space division of two dimensions with harmonious arrangement of lines, tones, shapes, and colors, than in forms of three dimensions. This conception has emanated largely from a growing appreciation of abstract pattern. Eastern art has been brought west, and we have found in it much of the beauty of abstract patterns. It has served as a reaction against the commonplace and fatal interest in profuse detail and naturalistic effect. In this it has been highly beneficial. It has been adapted to school instruction as now conducted, and is readily adapted to school work which is so largely on paper or in two dimensions. The fact re-

mains, however, that we observe all structural forms in three dimensions. When we make a drawing or picture we represent three dimensions in two. Perspective and light and shade express the third dimensions in graphical art. These have been neglected in our school work. With increased application of design to construction these elements which represent the third dimension and the appreciation of third dimension as an essential part in constructive design are necessary.

Note the use of modeled form in the working drawings for jewelry, terra cotta, mouldings and architectural embellishment in general, and one may readily see that pupils who anticipate this kind of work must possess as keen a sense of propriety and harmony in the third dimension as in two. In beautiful relief there is just as much consideration for the harmony of the section with the elevation as between the parts in elevation.

Classical relief and mouldings that appear beautiful to us are beautiful because of this harmony. Nothing develops this sense of third dimension quite so well as modeling, for it is a plastic art of third dimension. I suggest that in study of design for construction the third dimension be considered to greater extent than is now common. In furniture and buildings the relief of offsets in the form are a large consideration.

In our manual training exercises third dimensions and the proportion of third dimension to height and width in elevation are especially important. There is no law or principle that followed will guarantee good proportions. There is, however, one period of historical design that has reached high score in the production of beautiful proportion related to structural form. Every manual training teacher as well as every art teacher should have the ideal of this period so well in mind that he can use it as a criterion of beauty in constructed form. The Doric Temple of the Greeks is a concrete ideal for the teacher of constructive design. Conceive a period in design so keen to structural effect that every detail considers the subtlest optical result. There is not a straight line in that Parthenon. Contours are made curved to make them appear straight. Space divisions are subtly adjusted to overcome the distinction between light against dark, and dark against light. Every detail of ornament is designed in relation to the whole temple, and is also a perfect unit within a unit. How many of our manual training teachers know this building? It should be a motto on the wall of every manual-training shop in the universe.

The educational authority however disinterested in industrial training will rarely fail to warrant instruction for the cultivation of appreciation of beauty. On the other hand, the educator who is an enthusiast on industrial training in the schools rarely has equal enthusiasm for instruction in aesthetics. The logical balance seems to point to the conclusion that

aesthetical training is essential to *industrial training*, and that industrial training is in part aesthetical training. Aesthetical teaching that does not employ manual effort is futile. Methods of instilling appreciation through precept alone has little place in the common schools. To talk about works of art and beauty in nature without some manual effort to supplement the precept and make it a part of the pupils experience has no more effect upon children than to talk about science without the demonstration or physical experiment that we have now learned is essential. Children do not absorb adequate appreciation of art from even the best physical school conditions that can be given them.

As art teachers we must concede that few of our pupils will ever produce exceptional art, but we must also concede that they will never become even "desirable citizens" without some measure of appreciation for beauty and art.

Striking a balance between theory and practice in teaching the fine arts is striking a balance between the skill that will win a living wage and the appreciation that will develop individuality. There never was a time in history when this was more necessary than now. We are on the very crest of financial and material prosperity. Wave crests betoken a stormy sea. Within fifty years we have reached a point where the ten dollars our grandfathers received for a load of wheat is spent thoughtlessly for a toy by his grandchild. The purchasing power of that money is measured by the pleasure derived from the toy. The pleasure derived from the toy is proportionate to the appreciation of the toy, and we know that it is not appreciated more now by the grandchild than was the home made rag doll which our grandmother enjoyed. What is the solution of the present extreme condition? Is it not thoughtful design; the consummate pleasure of creative effort; work that brings its own reward; increase in the purchasing value by the substitution of thoughtful work for ready-made amusement.

The balance that I would strike, then, between theory and practice in the fine arts is the balance that uses theory as an incentive and guide to practice, and the balance that makes practice a constant development of theory, leading on to work well done, and the consummate satisfaction of accomplishment. Art may not be taught as so many facts. It is caught rather than taught, and the best of its teaching lies in the inspiration to thoughtful work regulated by principles instilled by good example and by theories investigated through practice.

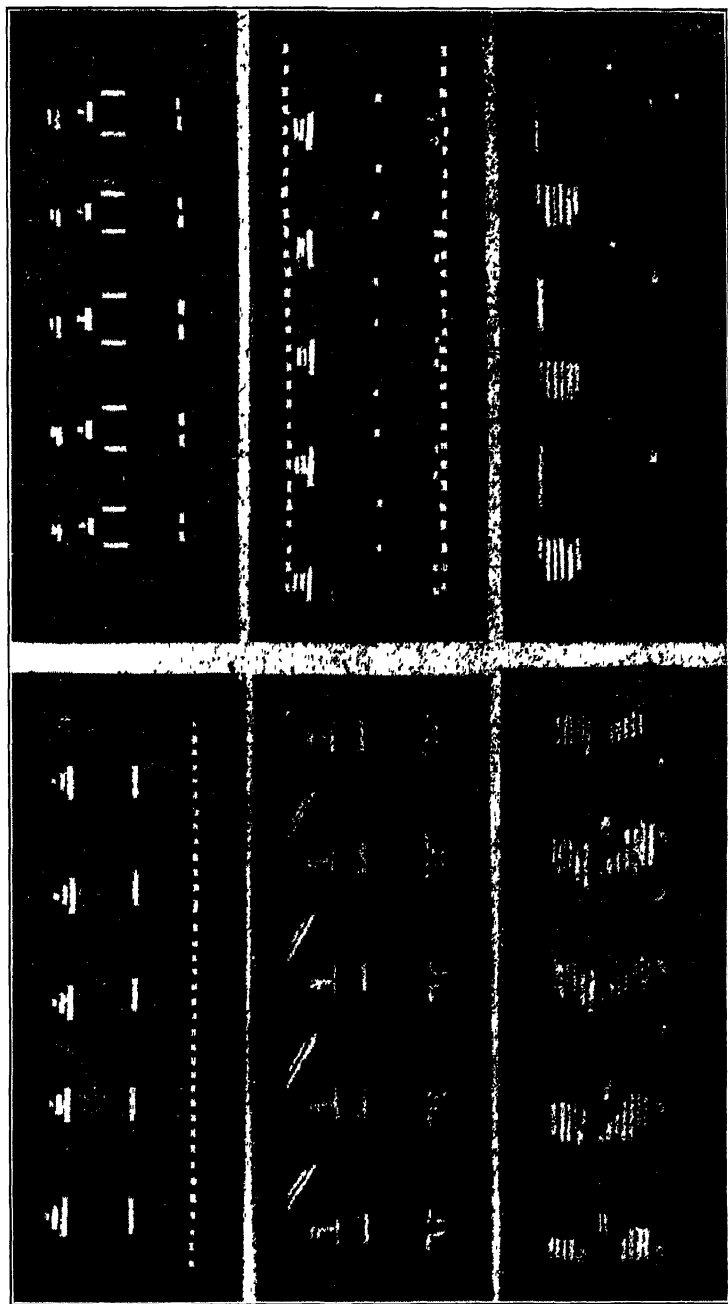
Department Round Tables

1. ART EDUCATION.—MISS LUCY DOBETT HALE, Chairman, Milwaukee State Normal.

2. MANUAL TRAINING.—FRED BUXTON, Chairman, Stout Institute, Menomonie, Wis.

3. HOUSEHOLD ARTS.—MISS DOROTHY BUSS, Chairman, McKinley High School, St. Louis.

4. VOCATIONAL EDUCATION.—CHAS. H. BAILEY, Chairman, State Teachers College, Cedar Falls, Iowa.



Paper Weaving. State Normal School, Stevens Point, Wisconsin

ART ROUND TABLE

CHAIRMAN, MISS LUCY DORRITT HALE,
Milwaukee State Normal School.

THE SERVICE OF ART IN THE PLAN OF EDUCATION FOR THE CHILD

By MISS FLORENCE FITCH,
Public Schools, Indianapolis, Indiana.

Probably I shall spoil enough good material for half a dozen talks this morning by touching on many lines instead of selecting and elaborating one. The wording of my subject precludes any partial or one sided discussion. For art to be of service must pervade everything we do, not be added as a trimming, or be labeled and pigeon holed to be used only on state occasions.

Few, if any educators now hold the creation of artists as the real goal in public school work, but they do try to produce artistic citizens. There is some danger, however, in this semi-vocational day, that the artistic product may be considered our aim,—instead of the influence the work and the product have on the producer; or, that the perfection of the product may be sought for the sake of the commercial value, instead of the commercial standard of perfection for the sake of the pupil.

Consciously or sub-consciously educators have in mind the true aim of any worthy course of study,—the general education of the child of today and the citizen of tomorrow. But may we not sometimes, in individual exercises, be so blinded by the pleasure in the work and delight in the product itself that we forget to question why we are giving the exercise, or whether it is the most educational thing that could be given. In this age of educational measurements it behooves us to test our own aims and purposes,—to see what we consider essential for the highest development of the child, and what we can best do to bring about that result.

For the sake of the child's own character, whatever he does should be done as well as he, not we, can do it under the existing circumstances. To be able to create beauty intelligently, one needs as tools a knowledge of form and an appreciation of beauty based on law and reason. A child cannot inherit a knowledge of form and how to represent it, but must work out his own mental images learning to see and appreciate through patient efforts at representation. But we must help him to understand the laws which govern beauty, that he may be able to produce more beauty consciously and intelligently. Otherwise his expression of the beautiful, captured by us before he spoils it, may be accidental and not even recognized by him as beauty.

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An art course must include representation of form and color as essential for creative art work and not just for the sake of attractive reproductions. Since the aim is knowledge and appreciation, it is not necessary that such exercises, in order to be of value, should always function immediately in some practical form; but it is important that the result on paper should measure the pupil's effort and ability, for nothing will more surely stunt growth than the acceptance of less than his best. With this thought in mind, I have brought not a complete or logical exhibit, but slides and a few samples of pupils' work to illustrate the educational reason for art study. Definite school exercises and lines of work have been selected to show how, as certain needs arise, art may be of service in the general education of the child.

Correct expression of form is based on understanding of proportion, and realizing the lack of that sense of proportion in most children and the need of developing initiative and powers of visualization, the old time paper construction work has been revived. Those of you who live in one room will realize what it means to hate "just things" and particularly useless, flimsy things which tumble over without being touched. If our only aim is the making of toys for the pleasure of the child, I might say wait until he is able to make them of stronger material than paper. But the purpose is to lead the pupil to think, to visualize, to create. We avoid dictation as far as possible, and instead lead the pupil by suggestions and questions to develop the pattern of the thing he wishes to make, reasoning it out along structural lines. This requires visualization and the study of proportion, of suitability, of form adopted to functions, and so aids directly the first mode drawing and illustration which naturally grow out of such work. First mode drawing leads into the study of furniture design and room arrangement in the upper grades, and that starts the whole scheme of home study.

This study of home decoration is definitely carried on in the 8th grade and high school classes. While the plan of work varies in the different buildings, the aim in all is the same; to interest the pupil in the selection and arrangement of artistic furnishings for his home, and to show him his own economic relationship to the family and to the community.

One teacher, desiring a practical problem for her mathematics work, decided to have her pupils draw to scale, plans for a model house to be built in the manual training department. The house is nearly completed and the decoration, furnishing, and landscape gardening are to be carried out. All measurements and estimates of the amount and cost of materials furnish mathematical problems, the consideration of furnishing and decoration, art problems, and the whole is broadly educational in its influence. Whether the problem starts as a basis for mathematics or as an art, manual training, English, or civics exercise, or because of the need for

remodeling a room, the result is the same, the general education of the child. In other cases where actual remodeling of a room is being carried on the work is made a center of study in many departments of school work. The pupils, for work in mathematics, take measurements and make the necessary estimates; for English they write to business firms for samples and prices and write the description of the room as it is, and the way it is to be after it is remodeled; for work in art they study the lighting, color scheme, choice of draperies and arrangement of the room and make designs for application where needed. The boys in manual training time paint the walls and woodwork, and lay the floor and the girls in the domestic art class make the draperies needed. The compositions, mathematics problems, drawings, color schemes, and other data connected with the entire remodeling problem are then assembled and bound in book form.

In the high school classes it has not always been found feasible to make definite application to a real room or building, but the problem includes the selection of a lot suited to the building to be planned, the study of necessary materials for building, the drawing of plans, the study of historic styles and selection of furniture, consideration of color schemes, etc. Emphasis has, however, been placed on the economic side of the problem, the cost of the lot, building and furnishings. The cost of the entire house to be estimated from actual data collected by the pupils, the whole amount not to exceed a certain given sum. These figures have been submitted to experts and have been found practical and if anything, over rather than under estimated. In connection with this home study, the problem of appropriate and artistic costumes is considered, and the family income is apportioned allowing for food, fuel, clothing, recreation, and savings, for the entire family. This necessitates the consideration of a fair division of the family income and makes the pupil realize his share of the expenses. Neighbors have become so much interested in this problem of the school children that they have made estimates of their own living expenses in order to give the children an actual basis for their figures, and so the value of the course reaches out to the community as well as to the child. In the selection of materials and in the consideration of the cost, pupils have had to go to the merchants who have become so much interested in the work that they are willing to give any amount of time and assistance to the pupils, and consider the course one of the most valuable in the school curriculum.

The problem of book making which was started a few years ago as an exercise in art and manual training has become the embodiment of various school activities in the general education of the child. Starting with the history of ancient forms of books and manuscripts and the study of early methods of printing, a respect for the well made modern book is aroused. Then the making of the book itself is begun. Each pupil de-

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cides on the subject for the contents of his book, and the covers, end papers, title pages, and book plates are designed with special reference to the subject matter chosen. The illustrations are the pupil's drawings and appropriate pictures selected for mounting in the book. The necessary consideration of margins in order to bind this material in book form has been of service in helping pupils plan neat and attractive papers. The wide range of subjects chosen for material in the books has awakened a great variety of interest and has been of so much service in enriching other studies that the making of these books is considered an educational problem well worth the time and effort spent. The study of lettering in connection with bookmaking led to the making of posters for schools and social centers, and some were made for business houses and exhibits in the store windows.

Someone has said, Art Museums have been considered a sort of cold storage for dead objects, a place to be visited as a matter of duty on rainy days; and where one must step lightly, speak softly, and not touch. But this idea is losing ground in places where the directors have realized the service a museum can render in a community. The efficient and hearty cooperation of the Art Institute with the public schools in our city illustrates what the child who visited the Metropolitan Museum in New York said that "Art Museums ain't only to brag on." Our children feel the Institute is theirs and have formed the habit of going to it so often that they feel quite at home. In exchange for an appropriation granted by the School Board, the Art Institute gives free admission at all times to pupils and teachers. A room called the children's room is arranged for special exhibits connected with the school work, for lectures of special interest to school children and teachers; and as a room to which classes may go at any time to work from museum material; pictures, rugs, carvings, tapestries, or whatever is desired being placed so that the material can be easily seen and studied. One hundred and eighty lectures by the Museum Director and others have been given this year in the Museum and in the various school buildings. Traveling exhibits have been sent out to the schools. Illustrated bulletins announcing exhibits, lectures, etc., are sent to the schools each month. In addition, ten free scholarship classes for children meet each Saturday for work in the Art School. A regular high school life class meets at the Museum three times a week, and four teachers' classes have been conducted throughout the school year. A total of about 15,000 children and teachers have visited the Museum for exhibitions, lectures, etc., this year.

We have found this aid from the Museum most helpful in our school work, and feel more sure than ever that art rightly used can be and is of service in the general plan of education of a citizen of the world.

DISCUSSION

Miss Gilman: Is there any definite time limit in developing plans described by Miss Fitch?

Miss Fitch: The eighth grade classes begin with the book making problem at the opening of the fall term. The cover is to be finished by November first, but the contents may be completed any time during the year.

Miss Teigen: Referring to the construction work done without dictation—How early is this introduced?

Miss Fitch: The plan is a new one tried for the first time this year in 3A classes. The usual dictated directions are given in lower grades.

Miss Frances Mason: How are the visits to the Art Museum managed as to time and carfare?

Miss Fitch: Teachers are allowed to take classes during school hours whenever it seems best. They may take a half day at a time. A teacher sometimes takes a class several times in quick succession in the development of a subject. Some teachers go only once a year. The street cars are used and the children pay their own fare whenever possible.

There are 160 free scholarships offered to school children in the Museum Art classes, and half price rates are offered to teachers for the Saturday morning classes. A class is formed in any subject desired by ten teachers.

THE EXHIBITS, FROM THE STANDPOINT OF THE CHILD'S ENVIRONMENT

By R. W. HIMELICK

STATE NORMAL SCHOOL, RIVER FALLS, WISCONSIN

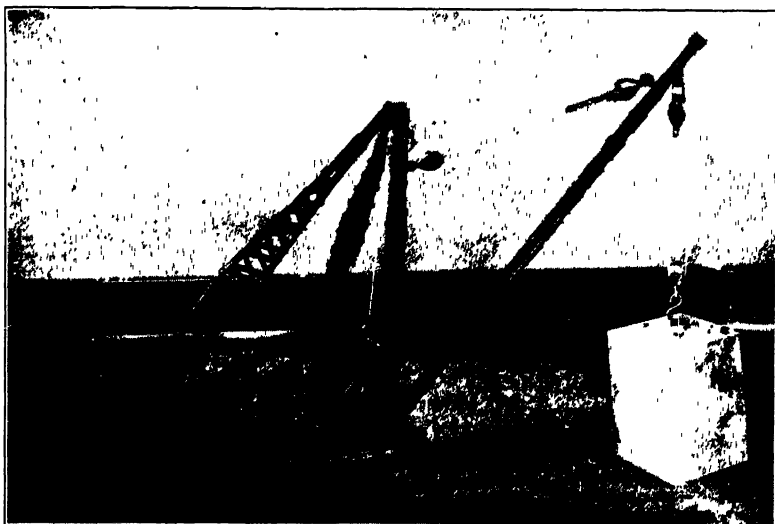
The training of the children has become a great educational drama. The whole country is the stage; the school authorities and the teachers are the actors; and the children are the stage hands. The privilege to participate in this great play has become exceedingly popular. Even politicians, editors, business men vie with each other and with the teaching profession for some part, usually that of the star performer. Great railroad kings are quoted far and wide when they appear upon this stage and proclaim that all former actors have been mad; have not seen the real truth; have failed to deliver the Holy Grail.

The strife is intense. Men and women are vying with each other for recognition. No amount of effort is spared to get the ear, attract the eye, to be written up in the local papers, to be featured in the popular magazines, or to be recorded permanently in a book. It is the unusual that is sought. We want to do something that is a little different from what our neighbor is doing. What is to be done may not apply to but a few people, yet it is given to the world as if it were of universal application. In fact, it may be purely a temporary matter whose influence is for but a day and the ultimate benefits may be in doubt, but as Americans, we are perfectly satisfied if the world applauds our efforts. The world applauds not he who administers to the simple, every day needs of humanity, but he who does something novel, no matter how fleeting the thing may be. We admire that which conforms to the laws of nature and the principles of heredity, but we laugh at the freak, the monstrosity, or, as the scientist says, the "sport."

These same principles hold true to a large measure in the art and manual training work in our schools. I am not satisfied in doing in my school the simple homely thing that becomes meat and drink for my children. I must get a share of the applause, so I seek hither and thither in an effort to find something that attracts the attention of the world, regardless of its effect upon my children. We are constantly disregarding one of the most fundamental principles in education when we seek that which is new and strange and fail to cause the child to fall in love with the Heaven that lies all about him. No greater opportunity can come to the child to know the world in which he lives and master the art of expression better than through art and manual training.



ARAB CAMP
Coping Saw Work on Sand Table
Milwaukee Normal School



300 POUND HAND POWER BOOM DERRICK
High School Class Project
Appleton, Wisconsin

Homer sang a song whose theme was the life of his people. A simple touch to a single strain caused the hearts of his fellow countrymen to vibrate in unison. Homer was able to see that which was universal in its character and clothed it with that which came within the realm of his own experience. In so doing he became a master, and his name and fame are immortal.

Michelangelo could carve his David from a discarded stone because his soul was filled with the same spirit that was thrilling the hearts of his fellow countrymen. It was not something that was imported from foreign lands to be grafted upon their experiences, but a vivid picture of their own experiences.

There was struggling within the souls of the common people this same emotion. They simply longed for a master hand to carve in cold marble their own feeling.

Burns became the idol of his country because he was able to interpret the environment in which he lived in terms that could be understood by the high and the low. He sang the songs of simple love. He elevated the poor peasant and made him feel the poetry of his environment.

Hovenden stirred the whole country by placing on canvas a universal characteristic of all peoples. From the lowest uncivilized tribe to the most highly organized modern society there is some recognition of the boy as he enters his life's work and breaks away from his home ties. The home is a modest one; the family of the common type; yet all hearts from the one who lives in the hovel to he who resides in a mansion, beat faster as each looks upon the scene. It is another case of a great theme expressed through a universal language.

James Whitcomb Riley is probably the greatest living poet, and in my judgment, will be one of the greatest poets of all ages, because he is able to express the universal attribute of his own experience in lines that touch a sympathetic chord in our own lives. He lives with us and sees as we see, but has the touch of an artist and paints in his verses the heart throbs of teeming millions.

The great poet, artist or sculptor is one who has become acquainted and ultimately falls in love with the traditions of his people, the birds that sing at his bidding, the mouse that lives at his feet, the river that flows by the grave of his sweetheart, the shady pool in which the boys took a weekly bath, or the simple, modest home that sheltered him in his boyhood days.

Education has been a partial failure because we have failed to recognize that the real substance of training lies all about us. We include in our curriculums an abundance of foreign materials of every description. The fetish of universal education has been so prominent that we have lost sight of the most potent factor in real education, the child's home.

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The great modern press brings to our attention so quickly and easily the achievements of the entire world. While at breakfast we read about what a great woman is doing in Italy for the training of her people. Before night people are on board our express trains and ocean liners rushing away to get first hand information and detailed instructions of just how to transplant this newly discovered panacea to the fertile brains of American youth.

This same great press features one of the actors of some far away community. It relates the marvelous things that are being done for the training of children. We close our own schools, urge the school board to pay our traveling expenses in order that we, too, may share in this newly discovered solution to a perplexing problem.

What we need today, as we have never needed it before, is an awakening in the study of the simple environment in which you live and in which I live. A thorough knowledge of this field will enable me to know the country that lies just beyond. I need to know that there are some great fundamental truths, but I must also know that to one community this truth is revealed through the simple country life; in another through the achievements of its great men; and still another through the worship of a God in song and upon canvas. The end is always the same, eternal in its character, but the means of expression is as varied as the universe itself.

As has already been said, there is no finer opportunity for the child to learn to know his environment and how to express the impressions which he receives, than through the subjects of art and manual training.

We have been led astray by confusing the truth with the form in which that truth is expressed. I am privileged to search the universe for truth, but I must look around about me for the means of expressing that truth.

WHAT AN EXHIBIT SHOULD REVEAL.

1. Work which comes within the range of the child's experience.
2. A type of work that is in harmony with the development of the child and not the standard of an adult.
3. Work which reveals a proper standard in the process of growth rather than a real finished product.
4. The projects should not only come within range of the experience of the child, but should reflect the environment from which he comes.

I am privileged in this paper to discuss the latter only, but shall say something concerning each of the others in order to emphasize the last one.

Life is too short for the school to attempt to build up for the child an artificial experience. Such a course puts him into an awkward situation at once. When he enters the school each morning he must leave his old personality at the door and put on the new one. The same thing is true

when he leaves for his home in the evening. We demand none of his experiences that have been accumulating for years; the home counts his new life as well nigh useless. The child has a large vocabulary. Why not begin in our work in school by improving that? He has made in his crude way many things to supply his needs. Why not begin to give him better use of this knowledge and ability? In other words, why not begin with the intelligence which the child has and not with his ignorance?

Many of the exhibits are too good. They do not represent the real work and worth of the students. We are tempted many times to touch up the student's work here and there in such a way that the finished product belongs to neither the teacher nor the child. In fact, too much stress is laid upon the finished product and not enough upon the real problem represented by the external object. The motive from within which caused or should have caused the student to express herself by means of a shirt waist pattern is the living thing. We urge students to use good English and choice words, but the thought back of the words is much more important. The work of the artist differs from that of the artisan in the few subtle touches that the former is able to give. It is this slight difference that adds life to the work. The business of the art teacher and the manual teacher is not to add those touches, but be able to recognize whether or not this universal element is in the process of realization. All of these problems must ultimately be justified upon the basis of the thought which they provoke, the emotion which they arouse, or the act which they cause. In other words, we must not seek so much for external perfection as internal emotion.

The impressions which a child gets are worked over by his childish nature and expressed in his childish way. He ought not and truthfully cannot express himself in any other way. Many times teachers and others are not satisfied with this. We want him to put the expression in adult form. In his academic work he will not do as we bid. What he says is lost, it is not tangible for any length of time. But this is not so with the knife box or the wall paper design. These things may be seen many times and thereby cause one to become conscious of their imperfections. We fail many times to realize that these imperfections are from the standpoint of the adult only. We are forcing upon the child not only the problem, but the adult standards as well. This whole matter in its relation to the environment of the child depends upon the thing which he does and the way in which he does it. We must not deceive ourselves by feeling that when a child does a thing cheerfully that it is because he really enjoys it or there is any motive from within for doing it. He complies because he instinctively wishes to please the teacher and others.

The big problem in art as well as in all types of industrial work, is how to select problems that will grow out of the environment in which the

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child lives. The art work in the public school which does not influence the child in the home, in his personal appearance, and in his relations with the life of the community, is of little value. If it does not influence him it is largely because it is of such a nature that he sees no connection between it and the environment with which he comes in contact. There is not much gained when we spend hours in making color charts and talking about the harmony of colors and at the same time have all of these rules violated in the combination of colors worn by the girls in the class.

We must give less attention to the art that finds its way into the waste basket and more to that which reveals itself in the life of the child. In so doing we would not close the door for the individual who is ultimately destined to become the artist. He would only fill his soul to overflowing with the beauties which lie about him everywhere. We would create in him a feeling that he has every reason to rejoice because his lot has been cast in such pleasant places. He will not have a tendency to look with longing eyes across the sea and curse the fate that placed him where his ambitions cannot be realized. Our whole educational system has a tendency to cause the child to look beyond his own environment for an opportunity to realize his ideals. Let us turn our attention in another direction, and give the child an opportunity to know and thereby love his environment. Let us have our art not for art's sake, not for everybody's sake, but for the individual's sake. In so doing we elevate the child and in raising his standard of living we better the social whole in which he moves.

THE EXHIBIT.

A hasty glance at the entire exhibit reveals a striking similarity. I believe that in many cases if the names of the cities were changed it would be difficult for the instructors themselves to recognize their own models. I believe that this similarity of exhibits is increasing from year to year. Any new feature that appears at this time, will in all probability become pretty well scattered over the country by the time of the next meeting.

This sameness in the type of work done in our schools cannot help but impress us with the fact that what is done has not come as a result of the environment in which the child lives. I find the same wall paper designs, tulips, spray of leaves with berries, the old violin, the worn out shoe, the tall vase and the low one, the path with a house near it, the hag in all conceivable designs, the apron, etc., in the entire list.

If these designs are worth while I would like to see them applied in some way or other in every home. I have little patience with a model. It may be all right to have a model kitchen, dining room, bed room, etc., in our school buildings, but it would be far better for the kitchen in which the girls work at school and at home, the dining room in which they

eat day after day and the rooms in which they sleep at night be these models. Any other room is likely to become a means of deceiving the public and others who may chance to visit our work. It is not what I can show visitors that counts, but that which has modified the life of the child as he works under natural conditions.

Has your manual training given the boy both the ability and the desire to do something in the home that will add to the comfort of the family, or has it left him stranded and disgusted?

The exhibits fail to reflect the environment of the child because our work is given with the idea that we are to make specialists of every student in school. I know schools that treat the work as if the entire lot were to become teachers. We need not be greatly concerned about the one who is destined to become a specialist. All of the machinery of the school cannot prevent such a one from reaching his goal. The Marx's, Wagner's, Burn's, Gladstone's, Washington's, Lincoln's, that have not been known to the world are indeed, few.

Another thing which prevents our work from accomplishing the best results, and this means the same as making it practical or serviceable to the child, is the lack of unity in all of the educational forces. It would require a careful research among all of the exhibits to discover any clue as to what constitutes the rest of educational work done by the children. The art, manual training, domestic art and domestic economy estranged and divorced in the majority of cases from the other work. I have found a few cases where the teacher or superintendent has stated on paper the relation which is supposed to exist, but I have searched in vain for a school where this connection is natural and not forced. Nowhere in the entire exhibit is this connection revealed.

I am convinced that if we would put forth the same effort to get our work to touch the life of the child that we do to imitate what has been done, better results would come. Every common article made by hand or machinery is susceptible to some touch that constitutes the difference between what is ugly and artistic. Art and industrial work should produce better proportioned chicken coops, straighter rows of corn, better colors on our buildings, better arrangement of dishes upon our tables, a golden mean between the present dress of women and the Elizabethan age, adaptation between what we are and what we wear, cleaner streets and alleys, purer language, better manners, and finally, better citizens.

I believe in the final analysis that all of these things will be accomplished; that this great country of ours will give us more money for education, that there will be no occasion for railroad kings or others to say that our education is worthless, when we discover that the "Holy Grail" is not to be found in foreign lands or distant cities, but is lying at our feet to be picked up and used.

DISCUSSION

Miss Cushman: Mr. Himelick says the work shown in our exhibits is "too good"—that we work for results rather than the development of the child. Possibly outside pressure is forcing teachers to produce results. Self preservation demands a good showing that the department may not suffer. The public needs instruction on this point.

Referring to Mr. Himelick's plea for use of the local environment as illustrative material rather than a forced, artificial environment, Miss Cushman explained that Indian life represents a primitive experience and the child understands simple relations better than complex. Thru the play activity, he grasps real facts.

Mr. Himelick: There is just as interesting material near the homes and schools of Indianapolis as could be found in any Indian situation and the boy likes better his own experiences.

Miss Silke: The keynote of the whole situation is the teacher's understanding of what is meant by these experiences. The average boy wants to fight and the warlike Indian appeals to him first. He must be trained to orderly thinking and taught fundamental principles of living.

Mr. Himelick: We, as teachers, think it necessary to drag in artificial surroundings. It is easier to teach Hiawatha than to discover and use the facts of local life. It is a question whether Indian life is more simple than the boy's life of today. If a supervisor is planning drawing lessons in a school system where primitive life is the basis of work, she would do better to work independently. We must know the environment of the children. We may teach at them, but cannot teach them if we do not know how they live.

Miss Rosenthal: The child loves fairy stories. The realm of imagination is very real to all children and our art work may well be based upon this fact. In a class in the slums of New York the boys wanted stories about Kings and Queens, anything rather than the things they already had.

Mr. Himelick: In discussing a topic from only one point of view, exceptions could very easily be taken to many statements. The speaker felt, however, that the opportunities of home environment were not sufficiently emphasized. It is not always wise to insist that any boy may be President or Governor. Other positions, more possible, are just as desirable.

At the close of the meeting, Miss Lucy Silke of Chicago was elected Chairman of the Art Round table for 1915.

MANUAL TRAINING ROUND TABLE

OPENING REMARKS

BY FRED BUXTON, CHAIRMAN

STOUT INSTITUTE, MENOMONIE, WISCONSIN

Manual Training has a value in vocational training as seen by most of us here in the middle west. This position does not seem to be so generally taken in the eastern states as far as certain advocates are concerned, although we notice even in Massachusetts a very definite reaction in favor of combining vocational training with a general education. It is going to be a difficult task to persuade the public to give up entirely its regular public school instruction in order to furnish a narrow but practical training for a certain job or group of kinds of jobs.

Trade schools will be needed more and more, but there is to be a larger place for the manual training instruction, which will take the boy while he is in a regular school and give him the elements of practical training for industrial occupations. The manual training is to be given a more important place in the preparation for trades, but it is to remain manual training and is to accompany regular educational courses.

The object of this round table is to bring together the two-fold aspect of general culture and vocational training with which manual training is associated. Mr. Henderson will discuss vocational values and Mr. Bennett will remind us of our earlier traditions, which should still be a guide for us.

HOW MAY MANUAL TRAINING CONTRIBUTE MORE TO VOCATIONAL PREPARATION?

WILSON H. HENDERSON

EXTENSION DIVISION, UNIVERSITY OF WISCONSIN, MILWAUKEE, WISCONSIN

For the purposes of this discussion, let us define manual training as that part of the school curriculum which is given under the general terms, Manual or Industrial Arts. I do not concede that this work, especially in the territory represented by this Association, does not contribute to vocational preparation, despite the statements of eminent authority. On the contrary, I am quite positive that it does, and has, and will contribute to industrial efficiency in no small degree. One reason for its not contributing more in the past is that it has not had the opportunity. The courses in manual training which contribute most to vocational preparation are given in the high schools and, in rare exceptions, in the 7th and 8th grades. The industrial surveys, from which the statements regarding manual training have been deduced, have always been made in the low grade industries and among the 14-to-16 year old children. These same surveys have demonstrated that these children have left school without completing the 7th grade. The children have therefore not received any manual training. Yet it is said that manual training has not contributed to their efficiency. Of course it hasn't! Neither has the trade school, not the technical school, because the child has never been near them.

The following statement was made by James W. Van Cleave, while President of the National Association of Manufacturers: "This is the experience of other manufacturers with whom I have conversed on this point: As compared with the average mechanic who has served an apprenticeship in the regular way, the average boy who gets rudimentary instruction in the manual training school, supplemented by a short period of shop work, has greater initiative, alertness and versatility. He is quicker in grasping new ideas. He has greater skill in meeting new conditions, and greater power in shaping them to his purposes. He rises faster and farther, and wins higher positions and commands a larger salary."

The United Typothetae of America, an association of employing printers, at its annual convention in September, 1912, appointed a Committee on Apprentices to make a careful study of the problem. After a thorough investigation, during which 6000 firms were consulted and reports canvassed from 420 towns and cities, the Committee submitted a

report in October, 1913. The following is quoted from the report: "The boys who yearly present themselves to employers, seeking situations are generally sadly deficient in those things that are the primal functions of the public school—namely, the ability to think, to observe, to reason, and to give intelligent expression to the thought. What the employers of this country demand of the public schools, before trade training is attempted as a public function, is a revision of present teaching methods that will hold the interest of the young boys and girls, and result in graduates who can think straight, think in numbers, think in drawing, think in color and form and proportion, together with a scientific manual or vocational training that will enable the hand to give intelligent expression to the thought." This quotation is especially significant, as printing is a skilled occupation.

Now if the manual training given in any section of this country has not interested the boys and girls and taught them to think straight, to think in numbers, in drawing, in color and form and proportion, and enabled the hand to give intelligent expression to the thought, it is a very poor type of manual training.

You may have noted that there is nothing in this quotation regarding the "controlling purpose" of the teaching, but that these business men want a type of school or instruction which will *result* in something. I cannot altogether agree with those who define types of education according to their controlling purposes. In the first place, I do not like that phrase, "controlling purpose," applied to education. *Controlling* signifies restraining or holding in check. Education needs a stimulating, inspiring or impelling purpose.

If the purpose of any training determines its type, then give the shop work for the purpose of fitting the boys for profitable employment, and Presto! it becomes vocational education. If the purpose of the pupil is the determining factor, our work always has been to some extent vocational since many of our pupils have done the work for the purpose of fitting themselves for some recognized vocation. But we cannot judge of institutions solely by their intentions and purposes. The purpose of the voyage of Columbus was to find a short route to India and the East Indies. Judged by the purpose, the voyage was a miserable failure.

To achieve a desired result, three elements are necessary: First, a dominating purpose; second, proper materials; third, intelligent methods. No one of these is sufficient in itself. The methods and materials used have a greater influence on the results than the purpose. Desired results constitute a purpose, but the presence of a purpose does not guarantee the desired results.

I prefer to define vocational education as any form of education through which the student acquires a marketable skill, knowledge or technique. Nevertheless, the value of a purpose should not be under-

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estimated. A clearly defined and definitely stated result to be attained is of first importance. One of the criticisms which has been made of manual training is, that it has had no clearly defined aims. If we have stated a purpose, it has always been in very general terms, such as development of appreciation, the co-ordination of hand and brain activities, developing the motor areas of the brain, honesty, or something of that character. To make our manual training contribute more to vocational preparation, we must have a clearly defined vocational purpose, and must use intelligent methods and the proper materials to accomplish that purpose.

At that place in the school course where we begin to offer differentiated courses in order to provide for individual abilities and aims, whether that place be the 7th or 8th grade, or the entrance to the high school, we may liken the school to a union passenger station from which trains depart to all points. To every person who comes to our union station, we may well propound the familiar question, "Are you just traveling, or are you going somewhere?" The persons who are just traveling with no destination in mind, should be sent along the line of general education, if there is such a thing. Those who are going somewhere and know where they want to go, should be sent along the route by which to reach that destination. It might be well to make some inquiries concerning our passengers. Can they stay on the train long enough to arrive at their destination? Can they take the parlor car on the roundabout scenic route, or must they take the day coach on the most direct line?

We have been taking it for granted that all of our passengers want to arrive at the same destination and have four years to devote to the journey. Even in our manual training courses, we have not ascertained the destination of our passengers, but have sent them all over the four years' route of woodwork, cabinet making, forging, pattern making, and machine shop work. The boy who has wanted instruction in machine shop work and has had only two years to spend in high school, has been no nearer to his destination when he stopped than when he began.

Since we know that a majority of our students cannot remain in high school more than one or two years, we should outline and offer one, two, and three year courses, giving a liberal allowance of time to the Industrial Arts.

Manual training may contribute a great deal more to vocational preparation without a great many changes in equipment, teachers or buildings. In the average city with good shop equipment in the high school, this may be done with very little additional expense. Scattered along through the 6th, 7th, and 8th grades are a number of over age boys, fourteen, fifteen, or sixteen years old, who will probably leave school at the first offer of a job. These boys would gladly devote a half of each day to work in one of the high school shops. It is not necessary to organize separate classes for

these boys. The instructor may put them to work, and allow them to work while he has his usual classes.

In many cities, the city or county engineer would be willing to place his blue print machine in the high school if the school would do his blue-printing. He would probably be glad to have the high school boys make some of his tracings. This will furnish the mechanical drawing instructor an excellent opportunity to do some vocational training. The engineer would be glad to place his testing apparatus in the manual training department with the understanding that the school do his testing. This is an excellent method of teaching the strength of materials, especially of concrete. This co-operating with the engineering department will give the school the opportunity to do some practical work and secure the use of additional equipment, besides demonstrating the value of this work to the community.

To give the boys a marketable degree of skill the first essential is that more time be devoted to the shop work. This is so apparent that it requires no further elaboration. To make the skill which is acquired, a marketable skill, the work must conform to the best commercial practice. The teacher must be familiar with the type of skill which is in demand.

This does not mean that the instructor must be a journeyman mechanic. A person need not be an expert accountant to be able to teach arithmetic. A journeyman is a mechanic who has, through continued practice, acquired an expertness which has become more or less automatic. He performs the operations common to his trade with no hesitation, and often with little or no thought. A teacher, while he should be familiar with the operations of the trade, need not have acquired that automatic expertness which is the chief qualification of the journeyman mechanic. The chief qualification of a teacher is his ability to teach, and he cannot teach others how to do a thing, unless he himself knows how.

The report of the United Typothetae Committee, which has been mentioned, has this to say in regard to instruction by foremen and journeymen: "The most that can be hoped for under this kind of apprenticeship instruction would be eventually to have new workmen that would know as much as the old, whereas our investigation has developed a universally urgent need for better informed, more efficient workmen."

I cannot altogether agree with those who would adopt all of the practices of the industrial shop in the school. A number of the practices of the industries are neither accurate nor scientific. For example, test the corners of any room and see how many are square. Note the frequency with which the pavements in our streets have to be repaired or re-laid. Note the names of some of the tools and appliances in a machine shop. Some of them are given titles which are not used in polite society. We are all familiar with the devil and hell box of the print shop. I believe

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that the school should teach the boys to call tools and appliances by their correct names, and if the mechanic's name for the appliance is vulgar or indecent, the schools should agree upon a name for that appliance and teach the boys to use that name.

This is another way of saying that I believe that the school is powerful enough to overthrow some of the practices of the shop, and that it should do so when the shop practice is inaccurate or inferior. The school should not teach unscientific methods just because they are used in the commercial shop.

Before considering any particular department of shop work, I wish to make some suggestions which apply to all departments. For the sake of the exhibit which is to be made at the end of the term, teachers do too much of the work which should be done by the pupils. (The manual training teachers are not the only sinners in this regard.) Teachers sharpen the saws, plane irons, scrapers, auger bits, and drills; temper the cold chisels and sharpen and set the tool in the lathe, planer, boring bar, or shaper; mix the stains and filler and sometimes apply them as well as the shellac and varnish, to the furniture and cabinets. If the work is too difficult for the pupil to perform properly, let us frankly admit it and select projects within his capacity.

Not only must we have more time for the shop work, but we must economize the time which we have. Our lessons and work should be so planned that no time is wasted. Teachers often talk too much to their classes. When the class comes into the room, the pupils are told to take seats and the teacher talks for fifteen or twenty minutes whether he has anything to say or not. Directions are given too many times. If the boy is to make any progress in a commercial shop, he must acquire the habit of doing the work with one telling. We should teach him to listen carefully to instructions and to follow them to the letter.

Our shops should be arranged systematically and kept in order. A good shop enforces the rule, a place for everything and everything in its place. The old mechanic's chief objection to having a boy in the shop is that the boy never puts a tool back in its place. In a first-class shop, all of the wrenches are not thrown into a box or drawer. They are laid out in order on a board or in a case. It is worth while to go into the engine room of a large steamer. Every wrench, oil can, and tool is in its proper place. One engineer told me that he could go into the room in the dark and place his hand on any tool there.

The stock rooms should also be kept in order. Imagine a commercial shop with pine, chestnut, oak, poplar and walnut all in the same pile, all thicknesses and widths; or with wrought iron, tool steel, and machine steel of various sizes in one rack. The need for teaching the value of time and material is too evident to need any emphasis.

If our purpose is to prepare our students for profitable employment, we must teach a number of things besides woodwork. There should be courses in printing and bookbinding, patternmaking, foundry work, forging, machinshop practice, sheet metal work, concrete construction, painting, electrical work, plumbing, bricklaying, and various other lines of work. In it all we must have a clearly defined purpose, which will determine the methods and materials which we use.

To make our woodwork contribute more to vocational preparation, we shall have to make a number of changes. I have been watching woodworkers at their work, and I cannot remember seeing one use a 10" back saw, a bench hook, a shooting board, or place a try square up by the side of his saw to guide it, or clamp a board across another and saw along by the side of it, using the first one as a guide. I have never seen a pair of winding sticks in a mechanic's tool box.

If we are attempting to teach cabinet making, we should have some cabinet making machinery. This is the age of the machine, and every boy should learn to operate machines if he is to work in the industries. We should have at least a saw table, a mortiser, a jointer, and a band saw. The boys should learn the stock moldings and their uses, and the names and uses of cabinet hardware, and the sizes of nails and screws. The automatic screw driver saves so much time and labor that it should be more commonly used in our school shops.

To get the necessary practice, the cabinet shop might make the book cases for the school. The school authorities might purchase the school furniture unassembled, allowing the cabinet making class to assemble and finish it. To get practice in finishing, the class might re-finish the seats and desks in one or two school rooms. The school might buy its desks and chairs "in the white," to be finished by the boys.

If we are teaching woodwork as applied to house construction, we should use the full sized tools and materials. It is possible to construct full sized details of houses, windows and door frames, full sized sections of roofs, floors, staircases, and porches. If the shop is crowded, a six-foot balcony may be constructed around it, if the ceiling is high enough, and these house details built on the balcony. In the average manual training shop, the steel square is used for the same purpose as the try-square, only on larger work. The chief value of the steel square is the figures on it. A combination of steel square and two-foot rule can solve many problems and save considerable work.

It is usually an easy matter to sell chicken houses, garages, play houses, or dog houses, for at least as much as the cost of the materials. During the past two years, the carpenters' apprentices at the Lane Technical High School of Chicago have made and sold two garages, which were made in sections in order that they might be moved from the shop.

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The boys should become familiar with stock sizes of materials and how to order them. They should use the common signs and abbreviations, such as 2x4-16, S.4 S., S.2 S., etc.

In the forge shop, the boys should not only be taught the manipulation of wrought iron and soft steel, but of tool, self hardening, and high speed steels. They should learn how to build a fire in a common forge, to use fluxes, and to temper steel in a variety of ways. The equipment should include an oil furnace, a power punch and shear, a power hammer, a pneumatic hammer, and some appliances for handling heavy materials, such as a crane, an air hoist, a block and tackle or a differential hoist.

The foundry should also have the modern appliances used in a foundry. Besides the cupola and core oven, there should be a molding machine, a brass furnace, and a rattler. The boys should not only learn to make a mold and pour the molten metal, but to line and charge the cupola. They should grind and polish the castings, and finish them the same as if they were in a commercial foundry. All small castings used about the school should be made if possible. The castings used on the ends of "window sticks" make a very good foundry problem.

Most of the electric work which has been done in the schools, has been on the order of laboratory physics. Different types of batteries, electric bells and shocking coils have been the most popular problems. But to make the electric work vocational we must give some marketable skill. Bells may be purchased for ten cents and liquid batteries are obsolete. The boys should learn something about house wiring, telephone work, plating, reading meters, and the care of dynamos and motors.

In house wiring, we should teach underwriters' rules, the making of joints in wire, knob and tube work, and the use of loom and conduit. A false wall consisting of two-by-fours and sheathing may be built against the walls of the wood shop. This wall may be used for wiring bells, annunciators, and telephones. Wires may be fished through it, lights may be wired and switches installed, and the entire problem of house wiring worked out on this wall.

The Chicago Telephone Company, which is a part of the Bell system, has given us ten phones for school use. While the phones are not of the newest type, they fulfill our requirements. Furthermore, the Chicago Telephone Company stands ready to employ our boys as soon as they graduate.

Even in the elementary grades, the boys may be taught to read a meter, and the meaning of the symbols used, such as H.P., K.W.H., Amp., V., etc. They will use these units more than they will ever use cords, and cd. ft. It is strange that some modern arithmetic writer does not include these units in his chapter on mensuration. Children may be taught to compute the cost of operating electric machines and appliances when the voltage, amperage, or the horse power, and the cost per K.W.H. is given.

Electroplating is a simple process. Stereopticon and moving picture operators are usually in demand.

In the machine shop the boys should learn how to clean and oil a machine and to keep it in order, as well as to operate it. No boy should be allowed to graduate from the machine shop until he knows how to lace a belt and to follow a route sheet. All metal should be cut with high speed tools. Jigs and templates should be made and used on work requiring a number of duplicate parts to be made. The use of the turret lathe is so common in commercial shops that the school machine shop should have one and teach its use.

In one school which does not have a foundry, rough castings for fifty vises were purchased and these were machined and assembled in the machine shop. Vacuum cleaners are becoming a popular school project.

The print shop and book bindery offer excellent opportunities for vocational preparation. As these were so thoroughly discussed yesterday, we will not dwell on them.

In conclusion, I wish to say that it is very easy to tell others what they should do. I do not want to leave the impression that we are doing all of these things in the schools in which I work. One of the pleasures of reading a paper of this character away from home is, as Mr. Dooley says of his booze, "That it allows a feller to have a good opinion of himself, undishturbed by the facts."

HOW MAY MANUAL TRAINING RETAIN ITS EARLIER EDUCATIONAL VALUES?

BY CHARLES A. BENNETT

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This question may be said to imply that with the existing pressure upon manual training to serve other than its original purposes it is in danger of losing "earlier educational values" that are real values and should, therefore, be retained. The question does not define the character of this pressure, so it will be assumed that this pressure comes from three sources:—

1. From those who wish to see manual training become more distinctly vocational in character.
2. From those who would make manual training chiefly a vehicle for teaching applied art.
3. From those who seem to believe that a shop organized as a producing factory will give better educational results than a shop organized as a school.

Taking it for granted, then, that this pressure upon manual training for change is fairly represented by these three propositions it now seems desirable to state rather definitely some of the characteristics of manual training instruction which resulted in the earlier educational values which should be retained. They are:—

a. **METHODOICAL DOING.**—The early work in manual training, whether it received its impulse from Russia or Sweden or France or from American practice in the mechanic arts was characterized by methodical doing. It was assumed that there was a best way to accomplish a desired result and that way was taught. The material end was clearly seen by the teacher, and the steps to that end were taken by each pupil in the order designated.

b. **ANALYSIS OF PROCESS.**—The steps taken in the teaching of a process were gained from an analysis of that same tool process as it appeared in practical work. They were therefore taken direct from industry.

c. **FUNDAMENTAL PROCESSES SELECTED.**—In determining which tool processes to subject to this careful analysis the most fundamental were selected.

d. **THE BEST TECHNIQUE.**—As great care was taken in selecting the tool process, so great pains was taken to teach that process according to the best standard of technique.

e. **STUDY OF CONSTRUCTION.**—The same principles of selection and analysis as were applied to tool processes were also applied to the study of construction.

f. WORKING DRAWINGS.—Whether the instruction was merely on tool processes or involved construction, all work was done from carefully prepared working drawings.

These six characteristics are mentioned as being vital in the earlier work in manual training. The question before us, then, is: How can these be retained under the pressure upon manual training that is coming on account of (1) the vocational demand, (2) the applied art demand, (3) the claims of the factory method of instruction.

I. THE VOCATIONAL DEMAND.—The problem of vocational training is a large and many-sided one. In fact, it is so large that no one should expect to find its complete solution in the manual training shop, yet whatever is taught in the manual training shop should be in direct line of preparation for more specific vocational training which may be given later either in a school or in a factory. In its best form manual training looks toward quite a large fraction of the occupations for which vocational training is needed, because it deals with the greatest constructive materials—wood and metal and clay and fibre, which furnish shelter and clothing and machinery and books. It is difficult to tell where manual training should end and vocational training begin. It is probably far better to say that there is not such ending and beginning, for the two are knit together as one fabric.

The general demand for vocational training is evident enough, but only in a few industries is it yet clear just exactly in what that training should consist. Before anyone can speak with certainty in reference to any industry he must have made an analysis of the industry. He must have found into what natural subdivisions the industry divides itself, what is most vital in those subdivisions, and then what elements may be taught. This is the kind of analysis that was attempted in this country at the beginning of manual training work more than thirty years ago. As a result of such analysis it was stated that what was needed in industry was accuracy, carefulness, neatness, perseverance, inventiveness and a longer list of other qualities. Then it was observed that *all* successful men need these qualities; consequently whatever will train these qualities in individuals should become a part of general education. Manual training had seemed to do this, hence manual training should become a part of general as well as technical education.

We know that this analysis and this inference were in harmony with the psychology of that day. We know also that since that time psychology has turned a somersault, but it now stands just far enough in advance of its position at that time to make the analysis of that day seem out-of-date and inadequate. The time has apparently come when a new analytical study is needed, and this time we may believe that it will be more specific; it will be of industries instead of industry. Just as we now deal more

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definitely with individual children in their instruction so we will consider more definitely the essential elements in individual industries. Something approaching this kind of analytical work has already been begun in at least one industry. If such work should reveal what may be regarded as the essential elements in vocational training and if some of these elements are common to many industries, as may be expected, then these more or less common elements may be considered appropriate material for manual training or prevocational or elementary industrial schools, provided, of course, that they relate to handwork instruction. Some of these common elements are quite sure to relate more closely to hygiene, to moral teaching, to civics, and to economics, than to manual training, but we know that some handwork processes are common to a large number of industries, and it is more than probable that these are not all and not adequately covered even in the best of our present manual training courses. So then, we may confidently look for new elements and important ones to come into what may still be called manual training, but until we see more clearly what these will be we cannot understand how they will need to crowd out the elements that were of greatest value in the earlier manual training work, such as methodical doing, analysis of process, selection of fundamental processes, the best technique, study of construction, and the making and use of working drawings. On the contrary, if there should still remain (and we do not doubt it) a division of school work, general in character, preliminary to specific vocational training such as is now more or less definitely designated as manual training, then we may confidently expect that its elements will be determined through the same process of analysis and selection and pedagogic arrangement as were the elements of instruction in the early days of manual training. We may confidently believe that the method of organizing the elements will be fundamentally the same as it has been in the past, but the elements may be different and the result different. But since the essential characteristics of the earlier work, which have been mentioned, depended upon the method of organizing rather than on any small element or group of elements selected, the introduction of new elements need not destroy any present educational elements that are fundamental. If, as now seems sure, the vocational demand upon manual training will bring with it more time for manual training work, then its educational value will be increased. There is no need to fear the loss of early educational values through the coming of the vocational demand.

II. THE APPLIED ART DEMAND.—At the present moment there seems to be more danger of losing some of the earlier educational values of manual training through the applied art demand than through the vocational demand. This is not due to any necessary elements in the situation, but entirely to factors which ought to be removed, such as over-enthusiasm for art expression which leads (a) to forgetfulness of construction and tech-

nique and (b) to the selection of crafts that have little social value and involve almost no construction. It would seem that this proposition needs no discussion before this audience. To diagnose the case is to suggest the cure—the proper training for teachers. It would seem that the discussions of the past few years by artists, and teachers alike ought to have made it clear that the very end and aim of applied art in school work is doomed if the worker does not know the structural basis of his craft and possess at least a reasonable mastery of the tools of the process. Yet it is not uncommon to see a teacher with a one-sided preparation “fiddling away” at tools or, on the other hand, enamored with the making of fussy knickknacks and covering them with curves and colors he ought to let alone.

The remedy for this is not in refusing to meet the applied art demand, but in giving adequate preparation to all the teachers who attempt to teach applied art. Until properly trained teachers can be obtained some restraining supervisory force may need to be exercised if the earlier values of manual training are to be preserved. But as we look toward the east we see signs of the dawning day when the applied art demand, as well as the vocational demand, shall add to and in no way detract from the original values of manual training in the schools.

III. THE CLAIMS OF THE FACTORY METHOD OF INSTRUCTION.—If the routine and method of the productive factory were likely to gain much headway in prevocational and manual training work then the factory method might be regarded as the most dangerous source of pressure upon manual training, so far as the earlier educational values are concerned. However, it seems to have been demonstrated that in the advanced stages of vocational training, after a good grounding in manual training work, experience in a producing factory is highly educative, provided a reasonable variety of work is done. This has been proven in manufacturing establishments and in producing factories in schools. It seems also to have been demonstrated that in the earliest stages of shop instruction whether that instruction be with strict vocational end in view or merely with a prevocational or a manual training end as the goal, experience in a producing factory is not as educative as experience under proper instruction in a school shop. To prove this it would seem necessary only to cite cases where factories have provided apprentice schools with special rooms for the beginners to learn the elements of handwork through graded courses of lessons designed to give apprentices the fundamentals in the best way. This way the factories have found to be the cheapest in the long run. Some figures gathered by Mark B. Hughes of Detroit for a report to the National Association of Corporation Schools are significant. To the question, “Do you believe manufacturers would be sufficiently benefited to warrant the expense of establishing apprenticeship or corporation schools? Thirty-eight of the large corporations in the country, including eleven of the largest

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railroads and many great factories such as the General Electric Co., the Westinghouse Electric and Manufacturing Co., the Western Electric Co., Browne & Sharpe Manufacturing Co. and R. R. Donnelly & Sons' Co., answered "Yes." There was not a single "No" vote and only one voted with a question mark. To the question, "Do you favor a special mechanical instructor or allowing the shop foreman to do all the instructing?" Thirty answered in favor of the special instructor, five the shop foreman, and two both. Anyone who has visited such a school as the one at the Lakeside Press in Chicago must be impressed with the fact that both the boy and the factory are profiting by separating the apprentices from the journeyman during the early stages of their apprenticeship and giving them work which is for the most part unproductive, except educationally. Moreover, as far as I have been able to discover, all the older trade schools accept this general principle in the treatment of beginners.

Yet in spite of such proofs and the experiences of other teachers, which need not here be mentioned, we still read in the popular press that the way for a school to be practical is to have a boy learn cabinet-making "because the school needs desks," plumbing "because a new school needs pipes," boiler-firing "because the school dynamos have to be kept running," and printing "because somebody has sent in a job, and will pay for it when it is done." This is considered the new type of manual training. The claim for it is that it is "real" and "serious," and by way of contrast the statement follows that the ordinary manual training "is not serious, not related to actual life."

If this kind of a program were to be carried out in the advanced or vocational work there would be no occasion for mentioning it in this connection, but as it takes the place of manual training in grammar and lower high school grades it is appropriate to point out possible defects:

First, things made in a manual training shop do not have to be sold at so much per hundred or dozen or piece in order to be serious business for boys. In fact, some believe quite the contrary. It is far more serious business from the boy's standpoint when he is going to have and use the thing he is making than when he is spending all that energy in order that somebody else may enjoy the thing he makes. All our experience, our psychology and our common sense confirm this if we have in mind the boys of manual training age before they have begun to feel the pressure for earning money or have fixed their ideas quite definitely concerning a vocation.

Second, this factory production method of teaching would tend to take manual training out of the realm of pedagogy and put it into that of the commercialized shop. It would ignore the good and see only the bad that has been developed in educational handwork during the past twenty years. If this were to be generally adopted it would in large measure deprive

manual training work of the educational values stated at the beginning of this discussion.

CONCLUSION.—In order to retain the earlier educational values of manual training we do not need to turn back any wheels of real progress. We may heartily welcome the vocational demand, and the applied art demand and, in their proper place, the suggestions that come from the methods of the producing factory. On the other hand, we should not be turned aside by each new thing that appears. It is to be expected that there will be some chaff to be blown from each year's crop of grain.

DISCUSSION

Mr. Crawshaw: My discussion of the papers of Messrs. W. H. Henderson and C. A. Bennett will be in the nature of a summary. In this I wish to emphasize two points, large ones I believe, not specifically dealt with by either speaker. They are, viz.:

1. The character of a course of study to accommodate both the cultural and vocational motive.
2. A method of dealing with the technical or informational element in manual arts work.

Let us discuss the papers first and emphasize these two points in conclusion.

Both speakers are agreed upon one important point, viz.: That to make manual arts work what it may and should be either as manual training or vocational training, but especially as vocational training, it must be given more time than is customary at present. With this we shall all heartily agree. We should, furthermore, with one accord, most urgently appeal to administrative school authorities for a substantial increase of time at the earliest possible date.

We shall agree also, I am quite sure, with what Prof. Bennett says regarding the original purpose of manual training—that it was designed, and should now be designed, to emphasize the analysis of processes and a wise selection of these in an order to mean a natural educational sequence; that it was and is a study of and a practice in construction to result in the best possible individual technique, and that it must be a methodical doing, the natural outcome of an analytical and sequential study.

We shall still further agree with him that if it is found, as a result of a careful study of the industries, that some elements in each are common to all, then they should become the common ground work of early industrial training whether we call it manual training or pre-vocational training. Furthermore, agreement will be certain upon this point made by Prof. Bennett: "In the earliest stages of shop instruction whether that instruction be with strict vocational end in view or merely with pre-vocational or manual training end as a goal, experience in a producing factory is not as educative as experience under proper instruction in a school shop."

Particularly would I take advantage of my prerogative by way of recapitulation to give strength to Prof. Bennett's as well as Mr. Henderson's point of view with reference to the applied arts. The over-enthusiasm for art expression and the under-valuation or even gross ignorance of construction and technique on the part of applied art instructors

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have together been the means of giving manual training much of the unwarranted criticism with which we are all familiar. In the name of justice, may we not have at least a reasonable conception of the scope of manual training on the part of the devotees, if not on the part of the indifferent observers?

With Mr. Henderson, too, we must generally agree that if manual training is to be more vocational than it has been in the past, many of the suggestions which he makes regarding specific courses of study must be put into practice. We do not wish, nor can we afford, to accept any but the "best commercial practices" in our manual arts, but the best we should take cognizance of and properly apply.

With regard to the teacher, his views are ours, I venture to say. Mr. Henderson said: "The chief qualification of a teacher is his ability to teach, and he cannot teach others how to do a thing unless he himself knows how." To know how does not necessarily mean that at one time he was a mechanic "who performs the operations common to his trade with no hesitation and often with little or no thought."

Now as to the two points which I wish particularly to emphasize. There may be question in the minds of some of us whether we should teach all manual arts with a vocational emphasis. The word vocational in this connection needs an interpretation. If, by it we mean that all operations in a shop should be performed "just as they are in a commercial shop," then some of us will abdicate from this position. If, on the other hand, vocational here means to do the thing which brings commercial practice forcibly to the consciousness of the child we shall probably acquiesce in this premise. But in doing so we shall probably demand that the actual process as it is carried on in the school, of whatever nature (regular public school or special industrial school) shall be modified if need be to account for two important conditions, viz.: 1. The age and immaturity of the individual. 2. The best educational means of economizing time and effort and securing substantial individual progress.

We must recognize this fact: That in the great majority of our regular public schools, in fact, all except the largest ones, that we cannot have two distinct courses, one the manual training course and the other the vocational course. We can provide with our ordinary facilities, and in the time at our disposal, only for one. May we not make it vocational in the sense that it shall be rich in vocational content and liberal in individual project-choice? Such a course will benefit all classes of children equally well and we shall need only to give to those who must soon enter a wage earning occupation more time in the course than we do to those who are fortunate enough to remain in school through a longer period.

To me this means, differentiated handwork in the upper grades, specializing features in the early high school, and courses of study developed on the basis of groups. In each group, beyond the first few, each individual will choose problems best fitted to his needs and capabilities and be given the time to devote to them proportionate to his economic necessities.

Upon my second point this is my thesis: that in most of our manual arts too little attention is paid to the technical or informational side of our work. Both for vocational and cultural purposes it is desirable that a child should know more, much more, than the mere doing of a thing which requires the manipulation of tools and materials. Yet under the pressure of little time and fine technique results, we narrow our work down to the

comparatively small things of making a thing out of some material. Let us teach *more about the industry* of which the project is such an insignificant part. The supplementary knowledge of materials, tool processes, and their historical, industrial and often geographical bearing will often be worth vastly more to an individual ten years after he has done some piece of work in the drawing room or shop than the piece of work as such can at this later date possibly be.

As I see it there is no conflict between manual training and vocational training. They are in a measure inseparable. By a scientific development of our courses and a reasonable recognition and use of community activities both will be integral parts of the daily work of all pupils. It is merely a question of purpose and emphasis in our work with the additional practical and imperative condition, of a sufficient amount of time in which to do a piece of work vocationally in an educative way.

The informal discussion proceeded essentially as follows:

Bloodgood: I would like to know if it is the common experience that boys who go to high school do not care to learn a trade.

Mr. Cann: We have at the Lakeside Press School for Apprentices, eight high school boys who spend about six months in the school, most of the time on composition, before going into the factory. They then work under the foreman or efficiency men in the various departments of the plant, with the idea of becoming executives either in the offices or in the factory.

The grammar school boys have an equal chance with the high school boys and some of them do as well and even better, due no doubt, to their longer apprenticeship and the fact that they stick better than the high school boys.

We pay the high school boys from eight to ten dollars at the start; the grammar school boys ten cents an hour the first year and increasing each year. The high school boys are more valuable at the outset on account of their age and longer training in English, etc., and on the whole have been fairly successful and seem contented. We now have about one hundred and fifty apprentices in the plant.

Leavitt: In answer to Mr. Bloodgood's question I would say: No—not as our high schools have been organized in the past. It is our business to change the nature of the high schools so that they will be suited to those who want to enter a trade. The high schools should do more for those going into the trades though not less for those who are going to college.

Buxton: There is no reason why the high school should not lead him toward the trade.

Brace: Since it is a fact that more of the boys take the grade work our problem should be to change the work of the upper grades.

Bauersfeld: It is a case of the survival of the fittest. The boys that get into the trade are those that we have killed off in the grades. Those who go through high school can get better jobs. We should give work in the first two years of high school suited to prepare for the trades, which would tend to keep in school those we are now killing off in the grades.

Abbott: I wish we could get over the idea that there is more money earned at the desk than in the factory.

F. V. Cann, of Chicago, was elected chairman of the Manual Training Round Table for next year.

HOUSEHOLD ARTS ROUND TABLE

CHAIRMAN, MISS DOROTHY BUSS,
McKINLEY HIGH SCHOOL, ST. LOUIS.

AIMS AND METHODS OF TEACHING HOUSE- HOLD ARTS IN THE GRADES

BY EMMA CONLEY,
STATE INSPECTOR OF DOMESTIC SCIENCE, MADISON, WISCONSIN.

Practically every girl in the schools will sooner or later manage a home of her own. Every girl must know how to select her clothes, how to repair them, and she should know enough about sewing to make some of her own clothing if inclination or necessity prompts her to do it. Every girl should know enough about sanitation and hygiene to care for her own health, the health of members of the family to which she belongs, and she should know something about caring for infants, children, the sick, and aged. Every girl should know enough about foods and cooking to be able to select and prepare those foods which will best nourish the body and keep it in health. She should know something about general housekeeping.

These fundamental facts about life in the home seem so elementary, and so vitally necessary to know, that without stopping to analyze the actual situation, we would say that every girl knows them, because she learns them at home.

Today, not more than one girl in five hundred learns these simple facts and processes at home. If we concede that they are essentials in a girl's education, and that they are not taught at home, then they must be taught at school.

No one questions today that domestic science should be taught in the schools,—the only phases of the subject now under discussion are, where in the course of a girl's education this subject belongs, and what parts of the subject are indispensable.

Recently a statement was made in a leading magazine, that fifty per cent of the pupils leave school without completing the seventh grade. Conservative estimates have placed the percentage of those pupils who never

enter high school, at seventy-five percent of the children of a city. Careful studies of the wage question in America show that the average American family must live on an income of less than \$500 a year. In this day of high prices, and ever increasing demands for "incidentals," it would seem rather important for the girl who is to be the business manager of such a family, to know something about the purchasing power of money, how much food and clothing would cost, and how to keep the family in health.

Granted then, that every girl needs this education, and that over half the girls never enter high school, and that not twenty percent of the girls ever graduate from high school, it must be conceded that the place for the practical and vital part of this work is in the grades, and that it should begin early enough in the grades so that every school girl will get at least a part of the work.

Briefly then, we shall say that in the grades we should teach hand sewing, which includes, *not fancy work or embroidery*, but patching, darning, mending, making of underclothes, and cotton dresses, the use and care of the sewing machine, the actual knowledge of the difference between the various materials, in common use for clothing, the proper use for each kind of cloth, its wearing qualities and durability of color, and what clothing is in good taste. This selection of material should not be a theoretical discussion carried on by a teacher who secures her first hand knowledge by reading up from a book on textiles, but every kind of material in common use should be brought into the school, and the pupils should be taught to select the material asked for by the teacher, and state its use. The consideration of price should always enter largely into the subject of selection, and pupils should have an opportunity to go to the stores and study what is in the market and in season. Later on suggestions will be given as to how that opportunity may be furnished.

Cooking is taught in the schools so that a girl may be able to plan, cook and serve, nutritious, appetizing and balanced meals, in a short period of time, at a minimum cost and a minimum expenditure of labor. However, food costs some money, and this fact must be granted before much progress can be made in a discussion. If a daily cooking lesson must be arranged so that the cost to the individual pupil ranges from one cent to one and one-half cents per lesson, very little can be accomplished. It is rather short sighted economy for a school board to pay \$350 to \$500 to equip a kitchen, \$600 to \$1,000 for the salary for the teacher, and then compel that teacher to spend eighty minutes daily on a baking powder biscuit lesson, when the average housewife, or the girl when she meets actual home conditions, must have them made and ready to serve in from fifteen to twenty minutes. Time should be fully occupied, and pupils should have as many things to do as they can accomplish in the recitation

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or work period. It is this dawdling over things that must be done quickly, in the actual home, which has brought forth the criticism so often heard, that even after pupils have had four years of cooking, they cannot get a meal on the table in a reasonable length of time, and in proper condition to eat.

Principals and superintendents must realize that if the period assigned for work is to be used to advantage, and not wasted, enough money must be provided so that more than one kind of food can be cooked. The way to prevent extravagance, and the making of "fancy dishes," is to permit the teacher to teach the preparation of only those foods, in the grades, which would be used in the average home at least every three months, or better still, at least once a month. The grade work should have for its motive the planning and serving of meals, and the lessons should be so arranged and grouped that they lead up to the serving of a simple breakfast, and later on to the serving of a simple supper or lunch. This can be well taught in the school kitchen, for the meal so prepared may be served at the pupils' own cooking tables.

In addition to the cooking and sewing, pupils should be taught how to care for their own room, how to sweep, dust, clean, and care for the various rooms in a home, the general plan of daily work, including marketing and accounting. Hygiene and sanitation are included in this part of the work.

This last phase of the subject must be theoretical, because no opportunity is afforded at school for general household work. Model rooms or model homes are not of much use, because the real healthful activities and varied duties of housekeeping are lacking in the play house. The theoretical work must be supplemented by actual work, under normal conditions, and these conditions are furnished in no place but in the average home.

The presentation of the theoretical side of a subject is of great benefit if the practical side of it can be developed immediately. The cooking of one hundred different kinds of dishes, in school, each one prepared but once in the course, is of no value unless the pupil has an opportunity to try the recipe again and again until skill, accuracy, and speed in preparation, are developed. The school cannot furnish the opportunity for this repeated practice, but the home can. That is what a home is for, to furnish the greatest opportunity for the development of the character and ability of the children.

School and home must work together for the development of thrift, skill, trustworthiness, and ability in the boys and girls and because of this, work must be assigned for home, and school credit must be given for work done at home.

To make the work of domestic science of practical value to grade pupils, a record should be made by each pupil of work done at home, the

record should be signed by the mother, and kept on file at school, and credit should be given for it. This work should not be a daily repetition of dishwashing, sweeping porch and kitchen, errands, etc., but the work should be varied until it rounds out the process of doing all the work of the home, for a day at a time.

By doing the marketing for the family under the guidance of the mother, or by doing the marketing alone for a given period, the girl learns more than she would learn from the theoretical or scientific experiments, or a discussion of articles from magazines or books, because she deals with the problems of life as it is, instead of with life as some one individual would like to see it. By this method the girl also learns the market price and value of clothing.

The aim then, of household arts in the grades, is to fit the girl who may leave school at the completion of the eighth grade to take complete charge of her own home, and run it within the income or salary of her father or her husband. The method of doing this is to teach household arts in the grades in the most practical, natural, way possible and to see that all the teaching given at school is supplemented by household work in a home under normal conditions.

GENERAL SUGGESTIONS FOR GRADE WORK.

SEWING IN THE GRADES.

It is never advisable to give pupils a series of models to be completed before work is begun on articles for use, or on garments. After certain principles are taught by the model method these principles should be applied on some useful article so that pupils may know the place and value of the work presented. The models should not be considered works of art, but merely a means to teach the various steps in sewing before attempting to apply them.

1. Teach the various stitches in common use, using coarse needle and canvas. The model may be made into a needle book or pin cushion. Apply stitches by making work bag.
2. Seams and hems. Apply on a fancy or work apron.
3. Darning. Apply on stockings.
4. Hemming of towels and table linen and sewing on tape. May teach hemstitching, and cross-stitch. Apply on towels or napkins.
5. Patching and three-cornered or flannel darn. Apply on clothing.
6. Have pupils make a slip-over night dress, other underwear, and teach buttonhole making and sewing on bands.
7. Teach pupils how to select material for under-clothing and make a simple study of the production, manufacture, and cost of cotton materials used.

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8. Teach methods of shrinking and how to set color.
9. Collect all kinds of material used by the class, have pupils learn the names of the different kinds, how to distinguish them, their cost and uses.
10. Teach the use and care of the sewing machine. When pupils finish the eighth grade they should be able to do good hand and machine sewing. *All imperfect work should be ripped out and done over until good work results.*

COOKING IN THE GRADES.

General directions for work, dishwashing, firemaking, and care of oven; care of kitchen utensils.

Simple classification of foods, and foods discussed and prepared in sequence or similar foods in groups.

Preparing of dried fruits and fruits in season.

Preparing potatoes and similar roots and tubers.

Cooking of cereal breakfast foods.

Preparing eggs in season; or some creamed protein food, as dried beef, or codfish, and coffee, cereal coffee, and cocoa.

Preparing of griddle cakes, simple muffins, popovers, and biscuits.

Laying the table, table manners, and care of dining room.

Planning breakfast composed of foods previously prepared.

Preparing and serving of this breakfast during the recitation period. Breakfast table to be set at pupil's own place in the kitchen.

Making simple cake, cookies, pie, and preparing cheaper cuts of meat as meat loaf, hamburger steak, simmered steak, etc.

Bread making.

Talks on care of teeth, eyes, hair, nails, etc.

Bathing and care of body; also talks and lessons on care of bedroom.

Encourage pupils to care for their own rooms.

Have pupils report each week on work done at home. This should include not only cooking, but care of pupils' own room, and observations of rules of hygiene previously learned, as brushing teeth, bathing, sleeping with window of bedroom open, and exercises taken.

AIMS AND METHODS IN TEACHING HOUSEHOLD ARTS IN THE HIGH SCHOOL

BY MISS FLORA E. HENKE.

HACKLEY MANUAL TRAINING SCHOOL, MUSKOGON, MICHIGAN.

The days of external defense of the manual arts of the schools are practically past, and now the problem to be faced is to do the very best to justify and evaluate the work to the student and to education in general.

This paper is to deal with the problem of household arts training for girls in high school, which are fast becoming the favorite agency of the modern education of the masses. Household arts is an often misused term, and it shall be referred to for the present as that form of vocational education which fits girls for occupations connected with the household.

These subjects in many secondary schools now are purely elective and will probably remain so until the day when work along the industrial lines will be as much a key to college life as the now so-called "cultural" studies. People, generally, acknowledge the advantage of the work to the girls who use it directly in a home or do similar work in industry. But, is it not expected of a college graduate to have broader views of life and in what more efficient way can she obtain a sympathetic understanding and co-operation with those active in a field than by having worked some herself along the same lines? Household arts training should also lead pupils to a rapid and ready execution of ideas, and that certainly is needed by all girls as are the independence and concentration so strongly developed in handwork.

Any course of study has a powerful influence over future careers, and ultimately over the destiny of occupation. We of the secondary schools have a precious charge in that regard as our years are the time to begin to specialize and differentiate, which places the responsibility upon us to instruct so as to meet the needs of those who end their school career with the high school diploma and those who continue in higher schools. This does not imply, however, it seems to me, that the high school should take the place of a trade school and attempt to turn out technical workers. We may help our girls in a choice of vocation and lay a foundation of general knowledge of a subject on which they may build and advance more rapidly if seriously considered, and there we must stop for the present at least as the scope of a single vocation is too narrow to fit into the high school course successfully. Economic independence is so ever present these days that greater education is demanded, and if the high school were to undertake direct vocational training, the general parallel educational train-

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ing would necessarily suffer. We should afford the girl an adequate basis of experience for the choice of a speciality and guide the process of selection as far as feasible. If we can help the girls to become better homemakers and make them intelligent about industries formerly carried on entirely in the home and help them to appreciate municipal factors and the effect of these on the home, we have largely accomplished our aim.

A partial immediate aim in household arts work has been well stated in a report of the government Commissioner of Education. "To give a girl an understanding of the responsibilities and function of the homemaker thru a knowledge of elementary principles of biology, chemistry, physics and bacteriology as applied to foods in preservation and preparation and to the conservation of the health of the family." This is well stated for the food problem, but the artistic side of the home is a very close second and that would bring up the housing questions and needle subjects. Here a large field of vocational choice arises which must be met without prejudice.

The practical work in the household arts course seems to fall naturally under three general heads—cookery, sewing, and fine arts work. The correlation between these subjects should be close, especially in the art field. How much an application of design will do to make the girls proud of their science note books and thus give a vital incentive for work in that field, even if otherwise not a favorite?

The most plausible plan is to carry the three divisions parallel, so as to have the main fields of vocational choice in hand at once and have immediate correlation of work. This general division of the field must not be misunderstood however. Any course which undertakes to limit itself literally to the actual subjects mentioned is not fulfilling its entire duty. As an illustration "sewing" may be used. Of course the skillful handling of a pointed piece of steel with a small hole is very much desired, but what of the golden opportunity to scatter seeds of knowledge concerning the beauty and hygiene of dress, the true and the false in textiles and dyes, the many processes involved in the garment from Nature's all-outdoors to the worn article and finally the consideration of labor conditions, Consumer's League and similar organizations. There is also the endless field of fancy needle work. Equally important subdivisions may be found under "cookery" and "fine arts" and all should be seriously considered.

A useful product should govern the method of procedure in this field, but only as secondary to work introducing features most fitted to the general intellectual and physical growth. "Why" should be more emphatic than "how." There seems a tendency, especially in sewing work, to overemphasize technique. Of course we have immature skill to handle; but what of the psychological value of "interest;" which certainly must be at a low ebb when the best efforts are sacrificed to technique. There

is always an incentive in having just a little more to work toward and the desired technique should be gained by a thoughtful gradation of work.

The methods of accomplishing the aims in this field may vary within wide range. Illustrations should never be entirely disposed of, but training should more and more enable the girl to connect the verbal direction and description with action. Needless to say every lesson should be planned in its true relation to the whole. This is so often overlooked, especially in dressmaking classes, as so much individual instruction is necessary and desirable, but there must be some practice in connecting words with action, and the teacher should feel in duty bound to give class direction wherever possible.

As far as observation has pointed out there seems no one ideal method of conducting classes in the field under discussion. The inductive lesson may be the very desired form for to-day's presentation; while a lecture method may be the only one possible on some following day. How well the lecture and research methods supplement the laboratory method at times! The lecture method, however, is unsatisfactory in the type of school under consideration unless followed by student thought, activity and discussion as there is great danger of the instructor doing all the thinking.

Whatever formal method may be for the time in use, it should always be remembered that girls are of more vital concern than cookery, sewing or fine arts products.

AIMS AND METHODS IN TEACHING HOUSEHOLD ARTS IN THE TRADE SCHOOL

BY MISS ORA A. BLANCHAR,
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I think, in fact, I know, that the aim in the teaching of household arts in grade, high school and trade school is the same:—To train the girl for a life of service, which means a life of happiness, the methods must vary according to the girl we receive and her immediate needs. The aim of the work in the trade school is ultimately to train the girl for work in her own home as but seven percent of the girls remain in the industrial world more than seven years. I am going to speak this morning a bit in detail on the methods used in the trade school because the work is rather new.

I have been asked about our methods in teaching household arts with a view to equipping a girl to earn her own livelihood. It is not the problems of the high school to train the girl in the technique—it seems to me that the work in the high school should be that of general education and not specific. We cannot speak too highly or too forcibly of the need of teaching the work in the grades and beginning the work early. We lose a large number of our girls in the first three to six months in the trade school, for if the girl has not learned to use the needle in the early stages she does not stick it out. It is pathetic as we see it in our evening classes. To see women who have reached the ages of thirty to fifty years who have never taken a stitch. A case came under my observation of a woman fifty years old, who had never learned to sew. You would have been ashamed to have a girl of ten years do the work this woman did. However, she had back bone and accomplished the work of the grade school in a very short time. She continued and finished a dress for herself, her daughter, and a suit for her small grandson. The younger girls of course do not have the same stick-to-itiveness.

If we have patience with them in the grades, if we do not have our ideal of workmanship so high that they cannot reach it—later on in life even if they cannot construct that which we would like to have them, they still can understand the work.

It is very important to teach the girls to be home makers. They must be trained to earn their own living. We must do this in the shortest possible time. The majority of the girls who come to us either work in the dressmaking shop, the store, or elsewhere. Our aim, our ideal, is to train these girls to be responsible individual workers to develop the initiative

in each person. To have them make good in positions of responsibility and to learn the methods used in the various places.

If we get girls from the grades who have had the elementary course they make rapid progress. These girls have had the foundation work, but when they come to us they come for a longer day. We have so many hours per week mapped out for the work—of that time twenty-five hours a week are spent in actual work at their trade, and ten hours are spent in supplemental branches, three hours in design and three hours in home keeping, which means the preparation of food, planning the expenses, and arranging their menus.

I will take up first the teaching of dressmaking as to methods. The girls cut by pattern through the first three departments. We then spend some time in drafting, and they construct their own patterns. We find the ability to construct comes first, and the ability to design comes later. I think that was explained very beautifully by Mr. Harvey this morning. It is only as they construct various articles that they learn to appreciate the beauty in form, in line, in color, and in technique. As they go on constructing and making their patterns, it is surprising how they begin to use the magazines. They pick a little here and a little there. Our object in teaching art and design is to give the girl an idea of color combinations and ability to sketch for their customers, so that they suit the individual case of every customer.

I have been asked if the girls expect to be self supporting. We have made it a point to try and arrive at the cost of every bit of material that is used in our building, in all the different departments. Half of the time goes to the school and the other half is the student's.

Someone said where do you get your orders? How do you solicit your patronage? The orders come so rapidly there are never enough dress-makers to go around. The customers must pay an ordinary shop price for the work.

In the home keeping department the majority of the girls stay with us for luncheon. The girls receive with the lunch which they bring from home, a cup of cocoa and soup, and pay a general material fee of fifty cents a month. Our menus are planned in family sizes of six. Our girls are given the recipes and then they do the mathematics. They work this out by multiplication. We feed all the way from 350 to 400 each day, and four teen girls prepare the luncheon. We change our program every three months. In the first year's work the girls prepare the luncheon and serve it. The second year they prepare for family groups of 5 or 6. Each girl who graduates from our school can assemble a meal, properly balanced at a cost not to exceed twenty cents a cover, and have it on the table on time. They know how to make beds, how to scrub a floor, how to clean a carpet. It is a part of equipping a girl for life. The broader the train-

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ing you give them to meet all conditions, the more efficient they are. We give the girls the ordinary work to do because these girls are to be equipped for service. As I meet girls more and more, I find that the greatest cause of unhappiness in the American girl is, the discontent with her own lot. I think it is because we become familiar with our surroundings and perhaps have a contempt for them. Our one salvation is to teach the girl to love her home. If you can make her think of the dirt on the various things in the house as simply matter out of place; if you can teach her to see beauty in the home; if you can teach her to see these things and bring her to realize that it is all the more beautiful when cleaned, you will be able to change the conditions of her mind. If we can put into the minds of these girls the sane way to wish for the more beautiful things in life, we have given her the key to happiness for herself and others.

DISCUSSION.

Miss Mason: I want to make an appeal from the art side of the work. The girls seem to think that the design is just adding a little ornament. They do not think of the beautiful line or of combination of colors. They think if they have a few dots and dashes they have the design. They must have special training in art. I know our time is limited for the preparation of our work. We must have a special training in design to be able to judge the problem along that line of beauty. It is the simplest kind of a problem. It seems to me that you have no confidence in your art instructor. Sometimes I feel there is little confidence between the instructor of the art department and the girls. Someone spoke that the teacher sometimes does not like the special design sent to her. I know that the first fundamental thing is fine workmanship. I have noticed in many of the exhibits that are coming into your work that were beautiful from every point of view, but we must see in looking over the work how many of the things are worked out in embroidery. It is a waste of time when that thing could be made beautiful without so much work. We art teachers want to help you from your standpoint, but we do not feel that it is always taken with the fullest confidence. We should break down the wall between the arts and household arts department.

Mr. Trybom: I am from Detroit, and I hold a peculiar position of Supervisor of Household Arts. Now how that happened to be so does not necessarily interest you, but I have held this position for fourteen years, and during that time I surely have picked up one or two things about the work. Of course I am willing and should naturally do so. The success the work has reached is due to the teachers entirely. I have been very much interested in the discussion here this morning, and there are several points that make me think of the difficulties we have in Detroit. Take for instance, the necessity of giving the girls actual practice in cooking. We have tried to do that as far as possible. One method has proven rather successful in experimenting on the teachers. That is, we try to arrange it so that the 8th grade girls have their lesson the last period in the morning, and that class is divided into smaller sections of four or five, and those four or five prepare a luncheon for a certain number of teachers, and in that way they get quite a little practice in preparing an actual

meal, and furthermore, they get that lesson very much impressed upon their minds. It is a lesson they never will forget. It has helped to make the work more practical. In high schools we have attempted to connect with the art work, which is a rather difficult thing to do. In one of your high schools the sewing is given two double periods a week and the art work one double period a week, and if a girl takes sewing she must also take that lesson in art. The lesson in chemistry must be taken in connection with domestic science work. The 20th century club of Detroit is preparing now a recommendation to the School Board that domestic science or domestic art be made compulsory in the high school, which naturally will help the work.

Miss Cushman: I cannot imagine being able to teach art, especially in the elementary school without teaching it in turns. We are a little at fault in the training of our teachers. With students who are coming to me for design with reference to the household art work, I find that it is necessary for me not only to teach them design, but to actually work out the plan showing how to make that particular design. I believe in our training school we must do a great deal to get these departments together. I have taken an interest in a school for dependent children in Illinois for the past two or three years. We have one hundred girls that live there. They must be trained so that they can take care of themselves, and they must be trained for some vocation. We have a real problem. These girls live in cottages. We have real farm work. They have to do their own cooking; do their own sewing and do their own farm work. I have found this difficulty. We have had good teachers, they could make the single biscuit, but could not make bread they could eat. The difficulty was that the teacher was trained in the normal school with a note book. I do not believe in note books in normal schools. The girls in this school have an entirely different environment from those in the public schools. They have to do the work and eat what they cook, etc. I hope you will help us along the practical side.

Miss Schaefer: I just want to know if at the trade school they always have orders for the children's clothes when they are commenced.

Miss Blanchar explained that they have a great deal of stock work on hand, and that children are more easily fitted than grown up people.

Miss Warren: I wanted to ask about the matter of material. Do you think there are more difficulties in the millinery department than in the dressmaking department?

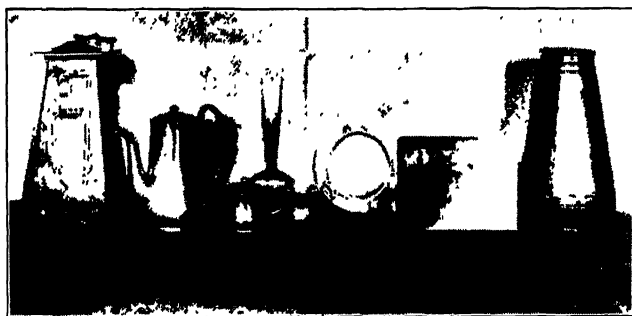
Miss Blanchar explained that they could not send out trimmers at the age of 16, as they have to learn the construction first and then the designing. A girl should be allowed to develop her art work and also allowed to express her own taste.

Miss Conley: Some very good work is done in several states in the millinery work. They allow the girls to bring the materials from home. That is, old materials, and they make some very good looking hats. In the city I have in mind, there is more work carried on in the re-making of hats than in constructing new ones. I saw an exhibit in one of the schools in the state that was very good. The teacher was a clever teacher, and she showed me a hat on which there was but ten cents expended. They used all old material on it with the exception of ten cents, and on this hat they had a price mark of \$5.85. She asked me to pick out the hat that cost ten cents and I could not find it. It was very good work. Some good work can be done in the making over of old hats. There is more in the art of construction of the old than the new.

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Miss Blanchar: In February of this year seventeen girls who went out a year ago returned for more training, and this year they were ready to take the examination. We can give the dressmaking girls their entire training in school because we take in orders at the school. This we cannot do with the millinery work because of the antagonism of the milliners. We give an examination twice a year in the dressmaking department. These girls are ready to earn a living long before we are ready to give them a diploma. If their deportment is not what it should be in a work shop, they are given three weeks in which to work alone. The millinery girls get paid after they leave the trade school. Very often dressmakers call up the trade school for girls, and their salary is arranged according to the work they can turn out.

Miss Frye, of Milwaukee, was elected chairman of the Household Arts Round Table for 1915.



WORK OF STUDENTS

Handicraft Guild School of Normal Art, Minneapolis, Minn.

VOCATIONAL ROUND TABLE

CHAS. H. BAILEY,
CHAIRMAN STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA.

In a few introductory remarks the chairman expressed the feeling that we were fortunate in meeting this year within a state and in a city where so much is being done looking toward the securing of some effective vocational training.

CONTINUATION SCHOOLS: SHALL THEY BE GENERAL IMPROVEMENT SCHOOLS OR VOCATIONAL SCHOOLS?

By WARREN E. HICKS,
INSPECTOR OF INDUSTRIAL EDUCATION OF WISCONSIN.

At the outset, the question uppermost is, "What are Continuation Schools?" Has the term a commonly accepted meaning? A confusion of thought is apparent in the current literature dealing with all new school topics. So serious has the need for a standardized terminology become, that it is receiving the attention of our national societies. The state and national administrative officers are endeavoring to get together. The situation is as chaotic as the Mexican tangle. Out of the chaos, it is hoped that there may be a peaceable understanding without mediation or diplomacy.

GENERAL IMPROVEMENT SCHOOL.

But what are Continuation Schools? A recognized authority has recently declared that a "Continuation (or Part-Time) School is a day school which requires that the pupil attend a portion of the working day, during the rest of which he is regularly employed." It is not necessarily a vocational school. Its aim may be to continue the general education of the pupil. As such, it is non-vocational. As such, it is a general improvement school.

VOCATIONAL SCHOOLS.

What are vocational schools? The same authority announces that "vocational education is any form of education whose aim is to fit an in-

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dividual to some definite degree to pursue effectively a recognized profitable employment, given only to persons who have already determined their aim to enter such employment, or who are already engaged therein and who wish to increase their efficiency in their chosen occupation." From this definition it follows that a continuation vocational school is a trade extension school.

It is noted that the trade extension instruction may take one of two forms. First, the form of instruction that is restricted to indentured apprentices in the trade taught, or second, the form of instruction given in a trade or occupation not followed by its pupils during the balance of the working day. This second form of instruction may be called a Trade Preparatory School.

STUDIES THAT ARE COMMON TO ALL.

It is prudent to accept these definitions in this discussion. At this point, an inquiry is made whether these three types of schools, viz:—"1. The General Improvement Continuation School." "2. The Trade Extension Continuation School" and the "3. The Trade Preparatory Continuation School" have any studies that are pursued by all students in common, and what those studies are. Fortunately, the answer to this inquiry is made, so far as it relates to Wisconsin, and Wisconsin material is drawn upon freely by the terms of the law. The General Improvement Continuation School pupil is to be taught English, citizenship, sanitation and hygiene, and the use of safety devices. The Trade Extension Continuation School pupil is specifically directed to devote two hours a week to instruction in English, in citizenship, in business practice, in physiology, in hygiene and the use of safety devices. This is also true of the Trade Preparatory Continuation School. The studies of all three schools are, therefore, common for two-fifths of the time that they are in session.

Studies that are not common to all schools.

In general, the Continuation or part time day school is in session five hours per week for each pupil. Two hours are devoted to the prescribed studies just named, and three hours are open for studies not common to all schools. The Director of Continuation Schools, therefore, has the privilege of determining whether these three hours shall be given to general improvement instruction, or to trade extension instruction, or to trade preparatory instruction. It must be assumed that all three of these schools are established. No one kind will serve all the individuals who are required by law to attend. It is the theory of these schools that they are maintained to serve the individual, and not groups of individuals. The groups are very small in order that personal help may be made effective.

THE PROCESS OF REGISTRATION.

Since the function of teaching is helpful service, and that is pre-eminently true in Continuation Schools, the question to be determined when pupils enroll is whether they are to be assigned to a General Improvement Continuation School, or a Trade Extension, or a Trade Preparatory. An indentured apprentice makes application and he is readily assigned to the Trade Extension School. His aim is determined and he is already engaged in a chosen employment. Whether the apprentice is indentured as a salesman, carpenter, machinist, painter, waiter, engineer, printer, blacksmith, mason, barber, plumber, shoemaker, baker, or other occupation, the decision is easily reached that a closely related and correlated trade extension course should be prescribed for the three hours. These apprentices all wish to increase their efficiency in their chosen occupation. It is admitted that many of these trades are recognized profitable employments.

COURSES OF STUDY.

In comparison with the whole number of people employed in the trades the number of indentured apprentices, that is, the apprentices who hold written contracts with employers, is distressingly small. The alleged apprentice, as a rule, has only an oral agreement, if any at all, and therefore, gets his instruction, if he gets it at all, after working the full day, by attending trade extension evening classes. The course of instruction that discriminates sharply between the three hours trade instruction that should be given to an apprenticed plumber and the three hours trade instruction that should be given to an apprenticed baker, is a generally recognized need. Not that such courses are not prepared, not that they are not in themselves excellent courses, but rather that the employer and the alleged apprentices do not recognize that such courses are available for the apprentices, and that such courses are worth while. Instead of co-operation in this matter, unfortunately we have the frequent paradox of both the apprentice and the employer being opposed to the written contract for apprentices on the same theory, viz., that the law is unfair. In the mind of the employer, it is unfair to grant an apprentice day instruction; in the mind of the apprentice, it is unfair to expect him to remain two, three or four years in employment under a stipulated contract. At this date, only the far-seeing employers and far-seeing workers are entering into written contracts.

CAMPAIGN OF EDUCATION.

Herein lies the need of a campaign for helpful education to the worker. It must be conducted with moderation and care. The united efforts of employers, workers and school forces will bring about improvements. The

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growth may be slow. It may not be spectacular. The time is already here, however, that when any worker shows that he has the fire within him to be more efficient in his occupation, he does not need to go to the evening class instruction. He may get it in the Continuation Trade Extension Day School, and he may get it without loss of wages.

GIRLS ATTENDING VOLUNTARY.

Shall we pass to the consideration of the school for the girls? Girls fourteen years old and older who are in domestic service and who enroll in the Continuation Day School are assigned without much question to the trade extension instruction in home-making. Sewing, cooking, home-dressmaking and home-millinery, house decorations, marketing, etc., all are activities that train for the life efficiency of the members of this group.

GIRLS IN FACTORIES.

Girls under 16 years, employed on labor permits, call forth a more complex problem. Here in Wisconsin we have a group of about 4000 girls with an average age of 15 years, in fairly good health, earning approximately an average wage of a little more than \$3.00 per week, working either constantly standing or constantly sitting, for 48 hours per week, and the majority of them live over a mile from their work, to which they walk. They are employed in candy making, canning and bottling, hand finishing, and sewing for tailors and knitters, spinning, spooling and winding, machine knitting, taping, net weaving, turning gloves and linings, pasting and labeling, cash and messenger service, etc., etc. The question is, what kind of a Continuation School shall be provided for them. Here are the three tests to be applied:

Can we say that they are engaged in a recognized, profitable employment? Can we say that they have made a choice of an occupation? Can we say that they wish to increase their efficiency in the chosen occupation?

The case of each girl needs to be passed upon separately. When the three test questions can be answered in the affirmative, it becomes the duty of Continuation Schools to provide the trade extension instruction. When any one of these questions is answered in the negative, the duty of the school is to provide either the Trade Preparatory Course, or the Home-making course, or the General Improvement Course.

With these girls scattered in forty cities in Wisconsin, with the various employments in each city, and the girls coming to school on a schedule of attendance that accommodates the employers, it is manifestly easy to know that teachers, in the beginning, have done the obvious thing that emphasized the Home-Making Courses. Later it may be expected that

more Trade Preparatory Courses and Trade Extension Courses will be developed. They may be limited in number and located usually in the larger centers.

CONSTANCY OF EMPLOYMENT.

The people who have dreams that these permit girls should have trade extension courses exclusively, get a shock when they learn that out of the 4000 girls, 500 hold the same job less than one month; 1000 hold the job less than three months; 1000 less than six months; 1000 less than one year, and that barely 25 hold the same job for two years. It may be added that of the 4000 girls, approximately 500 may be classified in the established schools in the fifth grade or below; 1500 in the sixth; 1000 in the seventh; 500 in the eighth; 500 above the eighth. Sometimes this information is used to justify a General Improvement Continuation School. The presumption ought to be that the established schools have done the academic work well, and that the Continuation School ought to do vocational instruction when it is justifiable.

SELECTED GROUPS FOR TRADES.

Manifestly, a few of these girls, in certain selected groups, may be led into skilled occupations through the activity of Trade Preparatory Courses of Instruction. They may become trained servants, dressmakers, saleswomen, laundresses, nurses, housekeepers, milliners, stenographers, clerks or telephone operators. These are recognized profitable employments. There is a body of information necessary to be understood in order to receive promotion in these employments. Promotion is possible, and a living wage is usually paid to workers in these occupations. When, therefore, in any city, a select group of girls can be trained by the Trade Preparatory Courses for any one of these occupations, it should be done. Out of the 4000 girls considered in this discussion, approximately 3500 are estimated to be taking Homemaking Courses, and 500 who are in the Trade Extension Courses. Exact information is not available until July of this year.

BOYS WORKING ON LABOR PERMITS.

What shall we do with the boys under 16 who enroll in the Continuation School? Take 4000 of these boys for consideration in Wisconsin. Their average age is 15 years. They are in very good health, have been quite regular at school before beginning their first employment, earn on an average a little more than \$4.00 per week, and many walk or ride long distances to work. They are employed in making shoes, as messenger and delivery boys, office and errand boys, timekeepers, helpers, sorting and assembling, packing and wrapping, folding and filing, tending, and such simple tasks generally. The educational value of their work is very little,

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if any at all. They shift often from one job to another job, and quite as often from one occupation to another occupation. The labor permit brings these boys within the open door of the Continuation School, and we are face to face with placing them either in the General Improvement Course, or the Trade Extension Course, or the Trade Preparatory Course.

NOT IN RECOGNIZED PROFITABLE EMPLOYMENT.

It must be said that these boys in general are not in a recognized profitable employment, that they have not already determined their aim to remain in and become efficient in any employment, and that therefore, general improvement instruction may not wholly miss the mark in serving the group as a whole. However true, in a general way, this conclusion may be, there remains the fact that it is pre-eminently the responsibility of the Continuation School to train and guide these young workers into a recognized employment wherein they may become self-supporting citizens. Measured with the standards of the established schools, they are about as well educated as the 4000 girls mentioned in this paper. The girls, outside of home-making, have at least seven constant occupations for which they may be safely trained; viz., servants, dressmakers, teachers, saleswomen, laundresses, nurses, housekeepers, while with the boys there are twenty or more constant occupations for which they may be safely trained, viz., laborers, retail merchants, clerks, draymen, salesmen, carpenters, steam railroad men, machinists, painters, bookkeepers, waiters, engineers, printers, blacksmiths, masons, barbers, plumbers, street railroad men, shoemakers, and bakers. The list might be extended, but this survey of the present work of these boys and their future prospects is about sufficient for the needs of this moment.

THE PRESENT AND THE FUTURE.

Only a limited number of these boys are now employed in the occupations in which they will be engaged in the future. Hence, Continuation Trade Extension Day Courses are possible only with a very few of them, possibly 400 or 500 of the 4000. Only a limited number of these boys, who are lacking in general education, will be greatly helped by general improvement academic courses possibly only another 400 of the 4000 under consideration. The dominant service seems, therefore, to rest through the activity of the Trade Preparatory Courses, which provide a form of instruction given in a trade or occupation, not followed by its pupils during the balance of the working day. Take the boy who is packing now, through the Trade Preparatory Course, and make him a thorough-going carpenter; the boy running errands now, through the Trade Preparatory Course, becomes a salesman or clerk. Obviously the Trades Preparatory Course, expensive though it may be, takes the boys drifting today, as they

are, at least 3000 strong, toward the constant occupations that they will find waiting for them tomorrow.

TRADE PREPARATORY SCHOOL.

The question is, in the last analysis, how to pick out the boy or girl and fit him or her to a life-long job. This fitting must be done by guidance and training. The part time day training takes place in a Continuation School. Such a school, in view of the needs of those who attend it, may be a General Improvement School. It may be a Vocational Trade Extension School. However, the great demand is for it to be neither the one nor the other. On the contrary, the conclusion is that the school that serves the largest number in a practical manner is the Trades Preparatory School.

INDUSTRIAL, COMMERCIAL AND EVENING SCHOOLS.

This paper is confined to a treatment of the Continuation School, the persons eligible for admission to it, and its courses of instruction. It is only one of the four kinds of schools that come under the new Industrial laws of Wisconsin. The other three are: 1. The Industrial Day School. 2. The Commercial Day School, and 3. The Evening Classes. Some people have been led to think that Wisconsin rested its industrial training under its new laws solely on the Continuation Schools. That is an error that should be corrected here.

INDUSTRIAL SCHOOL.

The Industrial School is a day school that provides trade education, the purpose of which is to fit for some one of the numerous trades or subdivided industrial employments. It is not a part time Continuation School. Because of the extensive sub-division and specialization of industrial pursuits, the number of different occupations for which industrial education can be devised seems to be almost without limit. The following are some of the trades for which, in greater or less degree, industrial training is now available in some communities; machinist, house carpenter, pattern maker, cabinet maker, plumber, steamfitter, moulder, weaver, electrical worker (in various forms), baker, butcher, printer, bookbinder, dressmaking, milliner, power operator, cook. A large number of other trades offer opportunities for special vocational training, such as those of teamster, motorman, locomotive engineer, lithographer, bricklayer, lather, pattern maker, and the like.

The Industrial School is a vocational day school, offering in general the following special characteristics: a. Admission requirements based upon those required for a working permit, usually 14 years of age. b.

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Often offers less than a four year course. c. Does not in general plan to give the full equivalent of an apprentice training. d. Is especially planned to deal with pupils from 14 to 16 who have determined their aim, though it may deal with pupils much older. e. Often offering trade extension courses as an organic part of the work of the school. f. Often shows more school organization and less industrial organization than a trade school.

COMMERCIAL SCHOOL.

The Commercial School is a day school that trains for wage earning. It trains for efficiency in commercial employment, given to pupils who have determined their aim in this respect, and under conditions which aim to duplicate real business conditions usually in some one field. Commercial education for vocational purposes includes those forms of education the controlling purpose of which is to fit for some recognized commercial calling. Of the commercial vocations, accountancy or book-keeping, and stenography are at the present time most clearly defined for purposes of vocational training. Salesmanship is being recognized also as a differentiated field admitting of systematic training. There are two distinct forms of salesmanship, i.e., counter or indoor salesmanship and field or travelling salesmanship. For each of these some systematic training is now possible. Other callings of a clerical nature are gradually differentiating so as to suggest appropriate forms of vocational education. Other examples of specialized commercial education are:—Secretarial work, Office work, Cataloguing work, Library work, Advertising, etc.

EVENING SCHOOLS.

The evening schools are open to all persons over 16 years of age in trade extension, trade preparatory and general improvement courses. The maximum state aid on any one school for any one year in any city is \$3000, provided that no more than \$10,000 aid be granted to any city in any one year. It is clear, therefore, that the Continuation school represents only one of the four industrial and commercial activities in this state.

VOCATIONAL PREPARATION.

One thought more, in conclusion. The May 1914 number of the Educational Review says that "The basis for any true vocational preparation is training to know a few things well and thoroughly, and in gaining such knowledge to form those habits of mind and of will that fit the individual to new duties and unforeseen emergencies." It is well, amidst all this machinery that seeks to train young people for efficiency, to cling to a few fundamental principles, like this one, and not lose our bearings completely.

THE BOY AND THE PRINTSHOP

S. J. VAUGHN,

NORTHERN ILLINOIS STATE NORMAL SCHOOL, DEKALB, ILLINOIS.

I wish to speak of some defects or weaknesses in the schools, to discuss the influence of printing upon the disposition, character, and mental growth of the boy, and to suggest it as a type of suitable work to aid in remedying the defects pointed out.

Hence, this discussion is not concerned with printing as a vocation or as a subject for vocational schools, except that in the main, the statements hold true of printing in connection with any form of school work.

The well known charge that only a small per cent. of our boys finish the elementary school has been proved, admitted, explained, and even justified by some. The bustle and hurry of business, the glitter of the market place, the desire to earn, and the indifference and economic stress in the home have all been contributing causes to this lamentable condition.

But a more serious charge still is reflected in Dr. Ayers' report concerning the thirteen-year-old school-boys in seventy-eight American cities. When thirteen-year-old boys are found in every grade from the kindergarten to the fourth year of high school, there is something radically wrong. But when we learn that in seventy-eight typical American cities one-half of all the thirteen-year-old boys in schools are in the sixth grade or below, we are driven to the conclusion that we are face to face with the most alarming condition that has confronted the American public school. And this condition cannot be wholly or largely charged to the pull of the commercial world, economic stress or similar causes, but in a considerable measure, must fall back upon the school.

I do not hesitate to charge that wherever a thirteen-year-old boy is kept below the sixth grade in the regular school, repeating and marking time to a deadening grind, those who are responsible for the situation and who are content to let it remain, are guilty of a crime against the boy, a crime against the school, and a crime against society which looks to the school for its safety.

Bad as it is, the situation is not so bad and unpromising when a boy, vigorous and ambitious, drops out fresh from wholesome, satisfy-

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ing work, shoulders a responsibility and undertakes to make his own way and to support those dependent upon his labors. But when a boy, discouraged and downcast by repeated failure in the same old grind, loses interest and self-respect, becomes bitter or indifferent, and drops by the way to avoid further misery, it means arrested mental and spiritual growth, the saddest fate that can come to one. Some day, there are going to arise in this country, some unselfish, whole-souled apostles of a fair show for the boys who haven't had a chance.

We are going to cease prating in per cents concerning our boys and girls. It is a grim pride that we take in that part of Dr. Ayers' report which states that a few of the best cities investigated show 80 per cent. of the thirteen-year-old boys have some hope of completing the eighth grade. The cities at the other end of the line show exactly the reverse condition, and this does not mention the great army already discarded. Some day, we shall not be content or happy or proud until the last boy has been reached and inspired and given an opportunity to do the best of which he is capable in whatever direction his inclinations may point.

As has been repeatedly pointed out, these failures on the part of the school to hold pupils in them and to keep them up to grade, is due in a considerable degree to two things, namely, poor teaching of the regular subjects, and a lack of a sufficient amount of vital, purposeful, interesting occupational work.

My conviction that the printshop is a wonder-worker among the retarded, truant, indifferent boys, is based not only upon several years of experience with sixth, seventh, and eighth grade boys, but also upon six years of experience with special classes of extreme cases sent to my department from the various schools and the alleys of a small city. Whenever the Superintendent, Dr. Chas. McMurry, finds a boy two or three years below grade, he sends him to this special class, and provides assistants for the book work.

Most of these special boys come from the fifth and sixth grades; some from fourth and seventh, and a few from the eighth, all ranking from twelve to sixteen years of age. The boys spend half of each day in class room work and half in the printshop. The first and third fourths of each day are given to some practical work in arithmetic, spelling, reading, writing, and stories from history and geography, besides one half-hour in the gymnasium. The second and four fourths of each day are spent in the printshop. Here they are given work on real jobs and let alone. I've found that boys need plenty of good, wholesome letting-alone.

The very exigencies of the work of composition, proof-reading, estimates, determining measurements, etc., demand greater knowledge of the very subjects in which the boys have previously failed in their regular

school work, and for which they have acquired a keen hatred. This kind of work, however, exposes a different aspect of such lines of regular school work as had previously held no interest or meaning, so they take hold of it vigorously, without command or ceremony.

A new motive arises, and what we may call a vocational attitude develops. The doing of pleasant, useful, beautiful work and lots of it, leads to a habit of industry and to a dissatisfaction with idleness. The only trouble arises when the work temporarily runs out. Pride soon begins to show on every hand; self-confidence and self-respect are revived, and the boy begins a new life unhampered by the old restraints.

In the last three years, I have had in this class, thirty-four boys from one to three years behind their grades. With a few exceptions, they have been pronounced dull, truant, unreliable, disorderly, and indolent.

Of this number, only one has lived up to his reputation as a dullard, and he is a physical wreck from inheritance, cigarettes, and Bright's Disease. In the matters of reliability, orderly conduct, and industry, they have happily belied their reputations.

Of the thirty-four, all except the one, have steadily and rapidly advanced toward the grades in which their ages would naturally place them. Three have been promoted to high school. Three of the older ones have gone back to their old habits of loafing, etc., five of the youngest are still in school, and the remaining twenty-two are steadily employed in good work at fair wages, although they had previously shown but little disposition to work either in school or out.

Of this year's class of fourteen, one is in high school, one has gone back to the alleys, the five youngest are still in school, and the remaining eight are earning from five to eight dollars a week at good work. Some of those who are now working will return to school in September.

In the printshop, first of all, the boys not only come upon a very interesting phase of the industrial world, but they also come upon rich bodies of thought material; and even the present day agitations have not altered the maximum that "as a man thinketh, so is he." This rich content in the form of printed matter for lessons, stories or text books for the school, and their paper, is brought before the boys illuminated, vitalized, and thrilling with the essence of life and reality.

Reading comes into use as a matter of course and without protest or a struggle on the part of the boys. Spelling becomes simply an essential step toward an end which the boy desires very much to reach. Calculations which involve a variety of arithmetical operations are continually arising and are met in the spirit of the interested worker who needs the information, rather than as an obstruction without significance to be guessed at under compulsion.

In my seventeen years of experience in teaching boys, I am con-

VOCATIONAL ROUND TABLE

vinced that there is no other work which so completely brings out the best effort of the boys, and in which they themselves set an absolute standard of accuracy and correctness, in so far as it is within their power. I have not seen the boy who would stand responsible for a job with a wrong font or inverted letter in it.

The growth of habits of industry, personal pride, and self-confidence is little short of marvelous. The fact that a group of boys working one-half of each day, will turn out hundreds and even thousands of dollars worth of printed matter a year, is sufficient basis for pride and self-confidence. The fact that through the paper, programs, etc., they reach and interest a large group of people in the community gives them a sense of proprietorship in the printshop and also in the school.

Furthermore, the printshop is a wonderful place to test ability in the way of leadership and in the matter of taking responsibility, and seems in a way to develop such ability or to lead them to such self-discoveries. One boy who was doing nothing in the seventh grade, was sent to the special class, became the foreman, stayed a year, finished the eighth grade, and went to work in a newspaper and job concern. Very much to the surprise and pleasure of the proprietors, the first month, he had assumed control of the twenty-two paper carriers and had organized them into an orderly group of boys with a systematic method of getting their papers for their routes.

The boy who is now foreman of our shop, was sent to us two years ago from the fourth grade where he had spent more than two years with apparently no progress whatever. He was pronounced "half-witted." Now, when I want a job of work quickly and accurately done, I give it to this little Swedish boy and go on about my work feeling that it will be done well and on time. While I talk, I haven't the slightest doubt that he is industriously rushing forward 2000 copies of a thirty-two page Bulletin which must be out at an early date.

My suggestion of printing as an aid in the solution of these difficulties is therefore based upon the following considerations of what printing does:

1. Appeals very strongly to all boys.
2. Arouses interest in the regular school work.
3. Induces habits of industry and a distaste against idleness.
4. Produces or revives self-confidence, promotes self-discovery, and gives a basis for genuine pride.
5. Excels all other work in the standards of neatness, taste, accuracy and care in details which it requires each boy to set up for himself.
6. Trains for responsibility and discovers those who are disposed to bear it.

7. Gives a large fund of information and considerable skill in a typical world industry.
8. It is genuinely constructive work, difficult of pure imitation.
9. Is the embodiment of art principles and training.
10. Establishes an industrial motive and a vocational attitude.
11. Last and very important, the boys are supremely happy in the printshop.

My contention with reference to the retarded boys is that neither one-half nor one-tenth nor one-hundredth of them are dullards, laggards, and defectives, but that they crave and need a different scheme of work—work that will enlist their interest, test their ingenuity, and lead them to self-discovery and self-respect, and that printing supplies these in practically an ideal way. I have come to the conclusion that there are no bad boys and but few dull ones; all they need is interesting, worthwhile work and a fair chance.

Some time ago, I was asked my opinion of school printing, and I made the following reply: My experience with the school printshop justifies my original enthusiasm and confirms my early belief that printing would work wonders in the school. Send me a sleepy-headed, uninterested, bad boy from the school or the street or the jail, and I'll put him into the printshop half of each day with a little instruction, and he will wake up, clean up, and get busy. He will at once become absorbed in this real man's work; his pride will grow with his skill, and he'll learn more spelling, more arithmetic, more punctuation, more grammar, more patience, and more manhood in three months than in the previous three years, if not in all of his previous life.

I have never tried a boy who didn't like printing, and I have never known a boy to tire of it. In fact, I have never known a real printer to grow tired of his trade.

What the school gains from the printshop in the way of richer material for the classes, a closer unity and a spirit of helpfulness among the various grades and departments, to say nothing of the ordinary commercial work which may be done for the school—what the school gains from these is too valuable to be computed.

Boys gather the general information of the printshop. They acquire considerable facility in correct composition and a surprising skill in the handling of a job press. They take on at once an orderly, business-like attitude, and will labor through any required task in another subject, if it only has some bearing on the matter of printing.

Interest insures skill and skill intensifies interest, and both skill and interest commend the boys to the local printers, who are always in need of just such boys, and who are glad to pay them a reasonable wage.

If we had more printshops, along with other industrial shops in our

VOCATIONAL ROUND TABLE

schools, and more skillful, sympathetic teachers who understand the boy and his problems, we would have but little retardation, we would have far less need for jails and reformatories, and we would turn out a more intelligent, reliable, and efficient army of boys to do the work of the world.

DISCUSSION.

Following the paper by Mr. Vaughn an opportunity was given for the discussion of the papers, but as no one responded Mr. Leavitt brought up a question, which resulted in essentially the following discussion:—

(Mr. Hicks had referred to the fact that he was on his way East to confer with other members of a committee of state directors of industrial education on nomenclature that was appointed by Mr. Prosser at the Grand Rapids meeting last fall.)

Leavitt: Can we not send by Mr. Hicks to his committee a vigorous protest from the Association against their settling these questions for the entire United States?

I feel that states must define these terms when they are ready to consider definite laws along these lines, but I do not want the radical ideas of some of those men in the East to be used to pry out of our schools some things that would not come under their definitions, but which are accomplishing more real good than many things that are liable to develop that will be within their definitions.

Messrs. Buxton, Waite and Selvidge questioned the need of opposing the work of the committee, and Messrs. Leavitt, Vaughn and Hagaman expressed the feeling that the work of this committee was likely to seriously interfere with the progress of our work, especially in some of the middle states.

Hicks: I will be delighted to deliver to the committee any message you may wish to send by me. Here in Wisconsin we are working comfortably under such definitions as we have, and we have refrained from issuing long circulars. I have been a silent partner on the committee, but I feel that something is gained and something lost in formulating definitions. I believe we should at least come to a nominal agreement on these definitions to prevent misunderstanding. I also believe Massachusetts is misunderstood. She needs these definitions.

(A telegram was read later in the convention from Mr. Hicks inviting the Association to co-operate with the committee.)

Roy C. Woolman, of Des Moines, Iowa, was elected chairman of the Vocational Round Table for next year.

IN MEMORIAM

MISS WILHELMINA SEEGMILLER

BY WALTER S. PERRY.

I have been asked to speak of the life and work of Miss Wilhelmina Seegmiller, who was for so many years a member of this Association. It is painful to do this and yet it is a pleasure, for Miss Seegmiller was one of the rarest types of perfect womanhood, one who was greatly beloved and one of wide influence.

I had the rare good fortune to name her for the position she so ably filled for 18 years as the supervisor of drawing in the Indianapolis schools. In 1895, Superintendent Goss came to the Institute with which I am identified saying he was in search of the best person obtainable to reorganize the work in drawing and art education in the Indianapolis city schools. He talked for two hours with Miss Seegmiller, and was convinced of her great reserve power. This conviction was evidenced by the fact that he returned at once to Indianapolis to have the nomination confirmed by the School Board, although he had intended to remain several weeks longer in the East. He realized that delay meant that Miss Seegmiller would accept some one of the several other positions for which her name was being used.

When I saw Superintendent Goss in Indianapolis the following spring I asked if he had been perfectly satisfied with his choice. He replied that he had only one fault to find and that was that Miss Seegmiller accomplished more than one person should be expected or allowed to do. That was always true of her. Full of ideas and of ideals she did wonderful work—wonderful in quality and most remarkable in its influence. Probably no other person in any similar position ever had such a wonderful influence, not only in her own city, but throughout the country, especially in the Middle West. She was a person of remarkable resources. The work of her city position was great enough for any one person, but it did not stop with the special subject that she supervised; her influence entered deeply into the lives and the environment of all the children of the city. In addition she wrote and published textbooks. She was the author of the finest set of drawing books published in this country: "The Applied Arts Books." She was the author also of a set

PERRY

of primary readers and other school books. Poetry flowed from her lips and from her pen, and her poems have been read and loved by a wide circle of readers. She lectured frequently and often, as you know, she lectured before this Association at the annual meetings. She was one of the most active persons I have ever known. Yet her activity was always governed by repose, it was always in the direction of the good she could render to others. But there came a time in her life when she longed for rest. In the spring of 1913 she wrote me of her great desire for the summer months to come when she could go to her cottage on Lake Michigan. She said in the letter "I am so tired, I long for rest, and I count the days when I may fly away to my summer home." Alas, the long rest of a well spent life, a life of lasting and wide influence was near at hand, and before the summer month came she had passed on to her reward. She will not soon be forgotten. There are many here who can never forget her. Her influence is lasting in their lives and in my life. Her beautiful character can not be forgotten. She was one of the most brilliant and the most helpful members this Western Association has ever known. I am so glad of the opportunity to speak even so inadequately of Miss Wilhelmina Seegmiller.

IN MEMORIAM

DR. CALVIN M. WOODWARD

By CHAS. A. BENNETT.

I have been asked to say a few words in honor of Dr. Calvin M. Woodward, the great American advocate of manual training, who died about four months ago at his home in St. Louis. Early in January Dr. Woodward went on a lecture tour through Southern Missouri, some of the time giving as many as three lectures a day. On Saturday afternoon, January 10th, he was stricken with paralysis, and on Monday afternoon, January 12th, he died. The physicians in attendance stated that his death was indirectly caused by over-exertion on the lecture tour. The funeral services were held at the Church of Unity, of which he has long been a vitally active member, and was attended by officials, alumni and students of Washington University, the Manual Training School and Smith Academy, as well as many other friends and public school officials.

Though seventy-six years of age at the time of his death, Dr. Woodward was active in his work even up to the Saturday he was stricken. This was in accordance with his temperament and habit. He was a vigorous, enthusiastic, untiring worker.

We know Dr. Woodward as the advocate of manual training—the man who championed the cause of handwork as a factor in general education, who fought the battles and won the day at a time when manual training had few friends and many enemies. We always think of him among the greatest men in the history of the manual training movement. We compare him with Salicis in France, Goetze in Germany, Salomon in Sweden, though his work was very different from any of these. He did for secondary education what has not yet been done in any other country. He created a new type of high school—the manual training high school—which has been and is now a vital factor in our developing system of secondary education. And, moving down from the secondary schools, his influence was potent in the development of handwork in the elementary schools.

Dr. Woodward's visit to England at an opportune time, on the invitation of Sir William Mather, had an important influence in that country which the English educators have been glad to recognize. It is not too much to say that Dr. Woodward was the greatest advocate of manual training that the English speaking people have produced.

But to say this is only to point to one side, though the most public side, of Dr. Woodward's rich and fruitful life. For nearly a half century he was a member of the faculty of Washington University, and during all this time an important element in its development, being, for many years, at the head of the engineering department. His interest in public school affairs led him to accept membership on the Board of Education of St. Louis, and later he did an important work as president of that body. He also served for five years as a member of the Board of Curators of the University of Missouri. And he has served in an official capacity in several organizations of engineers, scientists and educators. He was the author not only of the books we know so well on manual training, but his description of the Eads Bridge and its construction was a distinct contribution to the engineering literature of its time, and his last book was on his favorite teaching subject, applied mechanics.

But if we can believe the testimonials of hundreds of men soon after his death, his greatest work was as a teacher and spiritual leader of young men. "His was the great gift of clear exposition, and the greater one of being able to inspire the mind that touched with his." "His contact with his students was close, and full of that personal interest which had its reward in the respectful love that all of his students bore for him."

Such then, was our champion of manual training—our leader whom we are glad to honor. He was strong in courage and vigorous in physique, a strenuous worker, a man of insight and understanding, an inspirer and natural leader, willing to fight for an ideal, full of good cheer, with faith in God and in the divine possibilities of man.

Journal of Proceedings

May 6, 1914, 2:30 p. m.

The President announced the appointment of Mrs. M. E. Riley, Roy C. Woolman and Florence H. Fitch as members of the Committee on Place of Meeting, and of M. Emma Roberts, S. J. Vaughn and Hazel Hobbs as members of the Committee on Resolutions.

Nominations for members of the Committee on Nominations were called for and from those nominated, the following were elected by ballot: Lillian Cushman, Emily M. Dorn and Ira S. Griffith.

May 7, 1914, a. m.

C. A. Bennett reported in considerable detail the plans that were being worked out by the American Committee for the International Congress of Art to be held in Paris in 1916, and explained that an effort was being made to induce Congress to appropriate \$10,000 to provide for the expense of an exhibit that would adequately represent our work in the United States.

May 9, 9 a. m.

BUSINESS MEETING

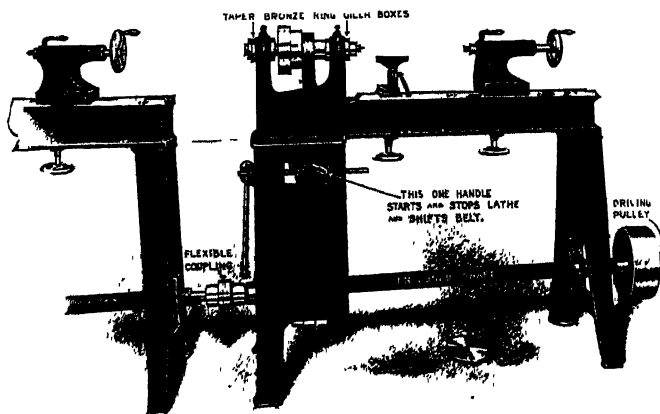
REPORTS OF OFFICERS AND COMMITTEES.

REPORT OF SECRETARY, MAY 14, 1914.

CASH RECEIVED AND FORWARDED TO TREASURER SINCE LAST REPORT.

From former Treasurer (receipt No. 539).....	\$ 12.50
Returned by Editorial Board, (loan at Des Moines).....	33.00
Advertising in Program:—	
Armour Institute, (receipt No. 547).....	10.00
Chase School, (receipt No. 548).....	10.00
Atkinson Mentzer Co., (receipt No. 549).....	10.00
Chicago Academy of Fine Arts, (receipt No. 550).....	10.00
New York University, (receipt No. 551).....	10.00
Peabody College, (receipt No. 553).....	10.00
University of Wisconsin, (receipt No. 554).....	10.00
Bradley Institute, (receipt No. 556).....	20.00
Loan from Editorial Board, (receipt No. 546).....	67.50
Membership dues, 476 @ \$2.00.....	952.00
Single admissions at Milwaukee meeting, 10 @ 25c.....	2.50
From Editorial Board, balance on hands.....	64.88
Total receipts	\$1222.38
Outstanding account—	
Commonwealth Art Colony, advertising in program.....	\$ 20.00

Wells Manual Training Lathes



Wells Shaft Underdrive Lathe with Single Handle Control

Safety and Simplicity

That is what all supervisors and instructors want and must have
in a Manual Training Lathe

The New "Wells" Lathe with the Single Handle Control

has no equal in those and other essential features. We welcome investigation and comparison.

One Handle does it all—starts the lathe, stops it, changes the speed. (*4 changes.*) Could anything be simpler?

All Moving Parts carefully guarded. Cover also furnished over Upper Cone Pulley if desired. You don't need to worry about the boys getting hurt when operating "Wells" Lathes.

Single Handle Control on both Shaft Underdrive and Motor Underdrive Lathes.

Demonstrator's Lathes with either Outside Face Plate, Tripod and Tee Rest or Hand Feed Carriage or both.

*Every Manual Training Supervisor and Instructor should send for
our New Free Circular*

F. E. Wells & Son Co.

Greenfield

Massachusetts

PROCEEDINGS

ORDERS ISSUED ON TREASURY SINCE LAST REPORT.

S. J. Vaughn, for Association stationery, paper, envelopes, and postage	\$ 7.15
Wagner & Hanson Co., printing programs and envelopes, 4050—16 pp. and cover programs, 3100 envelopes.....	154.50
W. H. Henderson, expenses of Secretary's office.....	55.18
I. S. Griffith, postage for program committee.....	2.60
F. H. Noble Co., 300 new badges, 250 ribbons on old badges.....	29.00
L. D. Harvey, expenses attending meeting.....	35.50
R. W. Himelick, expenses attending meeting.....	24.97
Katherine Dopp, expenses attending meeting.....	10.00
Florence H. Fitch, lantern slides ($\frac{1}{2}$ of cost).....	15.00
Thomas Trowbridge, operating and furnishing lantern.....	10.00
W. H. Henderson, expense of Secretary attending meeting.....	18.40
Ella Babcock, postage for Program Committee.....	4.50
Emily Dorn, postage, express and stationery, Exhibit Committee...	9.60
Return to Editorial Board by order of Council.....	50.00
L. R. Abbott, expenses of Treasurer's office.....	1.13
Cleveland Printing Co., letter heads.....	1.25
Total	\$428.78

EXPENSE OF SECRETARY'S OFFICE, 1913-14.

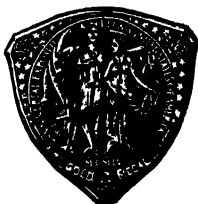
May 12, 1913, Postage	\$ 2.00
May 16, 1913, Express on Manuscripts from Reporter.....	.35
May 22, 1913, Postage	1.40
May 26, 1913, Postage	3.00
June 9, 1913, Stenographic Service	1.60
Oct. 31, 1913, Express on Treasurer's books.....	.25
Mar. 2, 1914, Postage	1.00
Mar. 6, 1914, Postage	20.00
Mar. 10, 1914, Postage	10.00
Mar. 15, 1914, Postage	2.00
Mar. 3, 1914, Express on envelopes.....	.51
Mar. 12, 1914, Express on programs.....	1.56
Mar. 20, 1914, Stenographic services	7.50
(Putting programs in envelopes and addressing)	
April 10, 1914, Telephone toll	1.60
April 11, 1914, Stenographic services	1.50
May 1, 1914, Stamp30
	\$54.57

(Signed) WILSON H. HENDERSON,
Secretary W. D. & M. T. Assn.

Des Moines, Iowa, June 13, 1914.

I have examined the report of the Secretary, the receipts received by him from the Treasurer, Nos. 11 to 31 inclusive, the receipts given by him numbering from 512 to 1009 inclusive, and his orders upon the Treasurer,

Gold Medal Crayons



KINDERGARTEN CRAYON

Large Hexagonal Sticks

LECTURERS' CHALK

White and Colored Square Sticks



"CRAYOLA" FOR GENERAL USE

Twenty-four colors. Various sizes

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BLACKBOARD CRAYONS, WHITE and COLORS, ETC.

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BINNEY & SMITH CO.

Makers of Crayons for Every Use

81-83 Fulton Street

NEW YORK

PROCEEDINGS

numbering from No. 22 to 37 inclusive, and found same to be true and correct.

Respectfully submitted,

(Signed) R. C. WOOLMAN,
Auditor.

Report of Secretary received and placed on file.

TREASURER'S REPORT.

For the year ending May 9th, 1914.

RECEIPTS

From former treasurer	\$ 12.50
From Editorial Board (former loans).....	\$ 33.00
From Editorial Board	132.38
Program advertising	90.00
Dues	92.00
Dues (Milwaukee meeting)	860.00
Paid admission to meetings	2.50
	<hr/>
	\$1,209.88
Total	<hr/>
	\$1,222.38

DISBURSEMENTS

Unpaid orders on Treasury	\$114.85
Printing program Milwaukee meeting.....	154.50
Badges and ribbons	29.00
Secretary's expense (postage, etc.).....	55.18
Expense Cleveland Printing Company	1.25
Expense Secretary attending Milwaukee meeting	18.40
Expense Treasurer's office (postage, etc.).....	1.13
Expense chairman exhibit committee	9.60
Expense chairman program committee	7.10
Letter heads, etc.	7.15
Speakers	95.47
	<hr/>
	\$ 493.63
Balance on hand	<hr/>
	\$ 728.75

(Signed) L. R. ABBOTT,
Treasurer W. D. & M. T. Assn.

Report of treasurer received and placed on file.

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*We have been making Colors for various purposes for
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WILLIAM POST,
Water Street, Cor. Fletcher, 1754-1798

WILLIAM POST & SONS,
Water Street, Cor. Fletcher, 1798-1800

WILLIAM AND GERARDUS POST,
Water Street, Cor. Fletcher, 1800-1834

WILLIAM POST,
Water Street, Cor. Fletcher, 1834-1836

BUTLER & BARKER,
Water Street, Cor. Fletcher, 1836-1846

FRANCIS BUTLER,
Water Street, Cor. Fletcher, 1846-1848

BUTLER & RAYNOLDS,
Water Street, Cor. Fletcher, 1848-1851

G. T. RAYNOLDS,
Water Street, Cor. Fletcher, 1851-1852

RAYNOLDS & DEVOE,
Water Street, Cor. Fletcher, 1852-1855

RAYNOLDS, DEVOE & CO.,
106 Fulton Street, 1855-1858

RAYNOLDS, DEVOE & PRATT,
106-108 Fulton Street, 1858-1864

F. W. DEVOE & CO.,
Fulton Street, Cor. William, 1864-1892

C. T. RAYNOLDS & CO.
106-108 Fulton Street, 1864-1892

F. W. DEVOE & C. T. RAYNOLDS CO.
1892

New York, Fulton and William St.
Chicago, 14-16 W. Lake St.
Kansas City, 1312-1314 Grand Ave.

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*It will be a pleasure to
School Colors*



*send you our Catalogue of
and Supplies.*

REPORT OF PROGRAM COMMITTEE.

Your committee begs to report that it has endeavored:

1. To get the printed program into the hands of members and others by March 1st.
2. To arrange a general program calculated to appeal to all members equally at all times, leaving the consideration of special topics to the Round Tables.
3. To formulate some system of remuneration which would recognize possible benefits accruing to performers as well as to the Association, so planned that the Association might have a satisfactory balance after giving uniform treatment to all participants.

To this end, the committee ruled that members or those who could because of their professional positions, well be expected to be members would not be paid; that others would be paid no more than expenses. In the execution of this plan participants were to be informed so that no misunderstanding might occur. The letter forms used have been deposited with the Secretary.

4. To so plan that the sessions might proceed on time. Letters were written to each performer to be, notifying him of the exact number of minutes available for his part.

5. To keep expenses within the resources of the Association.

How well or how poorly the work has been done must be judged by the report of the Secretary and the Treasurer, and your impression of the meeting.

This occasion is taken to thank those who so graciously and generously favored the Association upon invitation of this committee.

Respectfully submitted,

IRA S. GRIFFITH, *Chairman*,
R. W. SELVIDGE,
REGINA TEIGEN,
ELLA L. BABCOCK,

Program Committee.

REPORT OF COUNCIL.

The Council has held four meetings since its last report; one at the close of the Des Moines meeting, May 10, 1913, and three during the present meeting, May 6, 7, and 8, 1914.

I. At the meeting in Des Moines the relation of the work of the Exhibit Committee to that of the Editorial Board in the soliciting of advertisements and installing of the commercial exhibits, was discussed. It was decided to ask these two committees to consult each other early in the year and make their plans together to avoid confusion. It was also voted to



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Manual Training Benches

Domestic Science Tables

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Laboratory Equipment

Mr. Schoolman, we are in business for you, and we have your interests at heart. Write for catalogs and give us your ideas for special equipment and our designing department will gladly work with you in planning your next installation.

We have built complete equipment for a score of the best schools in the country.

Grand Rapids Hand Screw Co.

Front Ave. N.W.

GRAND RAPIDS, MICH.

request the Editorial Board to consider ways and means of reducing the expense of the annual report.

The continuation of our membership in the American Federation of Arts was discussed, and on account of the increase in dues from \$10.00 to \$30.00, our membership was voted discontinued. The Secretary was authorized to subscribe to the magazine "Arts and Progress."

II. At the meetings held in Milwaukee, bills for expenses of the Association were examined and approved.

Reports of officers and committees were received, and their presentation to the Association authorized.

Suggestions for the improvement of the affairs of the Association, received by the Council at their request from officers and chairmen of committees, were considered.

It was decided that the Council, shall, as soon as possible after the election of new officers and the appointment of new committees, communicate with the chairmen of the various committees, and that in such communications, a formal letter shall be transmitted, which shall state in chronological order, the business of the particular committee, or part of the Association concerned.

The resolutions offered at the meeting in Des Moines by the Vocational Round Table were discussed, and have been referred to a special committee, consisting of Chas. A. Bennett, Chairman; Frank M. Leavitt; Fred D. Crawshaw; to report at our next meeting.

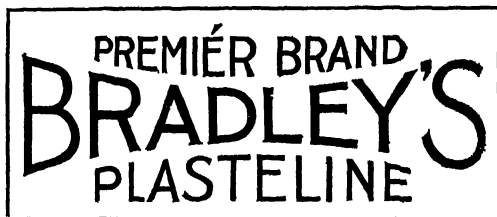
III. The constitution provides that the Council shall prepare for presentation at the annual business meeting, a report of the Association for the past year, and shall also present therewith a detailed estimate of the probable income and expenditures for the following twelve months.

The financial condition of the Association for the past year has already been given in the reports of the committees and officers. It has been found at this time impossible to carry out the provision of the constitution requiring a detailed estimate of the probable income and expenditures for the following twelve months.

Another duty of the Council declared by the constitution is to determine for the guidance of the standing or other committees, when not otherwise provided for by specific appropriation, the sums of money to be available for the work of such committees.

In accordance with this provision we recommend that the expenses of the program for 1915 do not exceed \$300.00 and that this sum be appropriated for that purpose, out of the funds now on hand. We recommend that the Editorial Board limit the expense of the annual report for 1914 to \$700.00.

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"THE PERFECT MODELING MATERIAL"

For

Sculptors, Artists, Architects
Schools, Kindergartens
and
Home Amusements

Send for Circular "HINTS TO SCHOLARS"

Prices on Application

Thomas Charles Company

207 North Michigan Ave., CHICAGO, ILLINOIS

Northwestern Agents for MILTON BRADLEY CO.

We also recommend that \$100.00 be appropriated to meet the expenses of the Secretary's office.

IV. Matters settled during the year by correspondence are as follows:—

The date of the annual convention of the Association.

The admission of advertisements of summer schools in the program for the present meeting.

The price of the Report to non-members to remain unchanged for the current year. This matter was referred to the Council by vote of the Association at the Des Moines meeting.

Respectfully submitted,

FLORENCE E. ELLIS, Chairman,
LUCY S. SILKE,
CARL N. WERNTZ,
F. D. CRAWSHAW,
EMMA M. CHURCH,
R. W. SELVIDGE, ex-officio,
W. H. HENDERSON, ex-officio.

Mr. Selvidge: I desire to call attention to one or two phases in connection with this report. The most important matter connected with it, I believe is the plans we have taken to establish the custom of putting the Association on a budget. I believe that this is the correct plan so that each committee on each line of activity will know in advance how much money it will have to spend in the activities of that committee. The Secretary will know, the Program Committee and the Editorial Board will know. These allowances may be more than will be necessary—they may be less. We have considered very carefully the probable expenses, taking into consideration the expenses of this meeting and previous meetings. We believe the appropriations are adequate if economically administered.

"Another important phase in connection with this is the fact that we now have the money on hand to meet all the expenses of the meeting of 1915 and it is that money that we have appropriated for that meeting."

A member: "May we have an explanation of the \$700 appropriated for the Editorial Board?"

The President: This is the sum that was placed for the use of the Editorial Board. That is exactly what it cost to print the report for this year, and we saw no reason why this should not cover the expense of printing the "Proceedings" for next year's meeting. The Editorial Board has been self supporting. They get their funds from the advertising. They have been earning money and have contributed of what they have earned to the Association.

Mr. Bennett: I judge from the explanation that it is not going to hamper the Editorial Board in any way during the present year, but I would like to keep this thought in mind; that the Editorial Board, in the estimation of quite a good many members of the Association, ought to be encouraged to make the annual volume that is issued just as attractive a publication as they can make it with reasonable expenditures so that the

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WATER COLORS

The Water Colors described on this page are manufactured in our own laboratories, from the best ingredients obtainable, by specially designed machinery and by experienced workmen under skilled supervision.

The styles and assortments are arranged to meet as fully as possible the great variety of demands that are the outcome of individual experience. Our stock is composed of about forty colors in moist and semi-moist forms in tubes and pans and a limited number of colors in dry cakes.



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Manual Art Crayons
Bradley's New Drawing "Models"
ADHEZO (Sticks Like Glue)
Latashaw Rules
Drawing Tables

Textile Designs
Floral Elements
Designs for Leather Work
Decorated Models for Woodwork
Waldcraft Dyes
For—1 Stick Printing
2 Block Printing
3 Stenciling

Books

PRIMARY MANUAL WORK—By Mary F. Ledyard
CONSTRUCTIVE WORK—By Edward Newell
EDUCATIVE SEAT WORK—By E. F. Worst and Edna Keith
DECORATION OF THE SCHOOL AND HOME—By Theodore M. DILLAWAY

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Northwestern Agents for MILTON BRADLEY CO.

report will stand for the Association as one of the indispensable documents of the year in our field of work. One of the features of the report that has brought it into prominence has been the illustrations. It seems to me that the report ought to if possible, reflect the very best and newest things that we find at our exhibition as well as the ideas put forth at our convention. I hope that this remark will not discourage the Editorial Board but that it will be possible for them to do something that will make our publication stronger each year. I would like to see the Editorial Board have an advisory committee to assist them in selecting illustrative material so as to make it more attractive as the years go by.

Mr. Vaughn: I believe that the sum of \$700 has been arrived at after some consultation with the members of the Editorial Board and they expressed the opinion that the report could be gotten out by using even more illustrations than we had in the last report for that sum. I am quite sure however that if the board should find that they could not get out the right kind of report for that sum, that the Council would permit them to use additional funds for that purpose.

Mr. Selvidge: I wish to call your attention to the expenses of the report of the Springfield meeting. They show that the report cost \$795.08. In the expense there is one item for clerical work in reporting the meeting of \$150.00 but we have been able to get the meetings in such shape that this expense will be much less in the future.

Mr. Kurtzworth: It is not a matter of how much we spend, but how much good we can do in the work. We as educators in the art line should make a standard to show other people. These printers and designers are more particularly interested in how much the thing costs, but we ought to change this idea. A printer will say here's \$17.00 get me up a booklet.

Mr. Vaughn: Since this is intended for one year and is only a temporary arrangement, let us dispense with the matter until later. If the members are all satisfied with such an arrangement I can see no serious objection to letting this go by. If it is going to cut off anything, I would not limit the price at all, but it simply means that the Editorial Board, must guarantee to keep it up to standard and even go above if possible.

Miss Silke: I think Mr. Bennett's point is very well taken. We should never lose sight of the fact that our report should be the best possible. I think the discussion in the Council was brought about partly by the fact that the council is attempting to limit a Board definitely in its expenditures when it really had nothing to do with the source of its income. It seems that the Exhibit Committee has not understood that it is simply a matter of lending its assistance to the Board by giving floor space to the advertisers whom they already had, but also to help them secure others. Would it be better for the Association if the Editorial Board would not attempt to make itself self supporting and to have all the money from advertisements turned into the treasurer and then make a liberal appropriation for the board? I think that this was not entirely settled. It was simply an agreement of the Council, in order to make a more definite recommendation for the Association for the next meeting.

Mr. Crawshaw: It has been my experience the past year on the Editorial Board that while we now have the promise that a considerable sum of money will be allowed us, it seems to me this is the only way of doing this work. I should dislike to see the character of the report any different than it has been at the times when the report was most pleasing to the majority of the members of the Association. I confess that the board and certain members were not pleased with the report as put out. The expense of the report might be reduced. On the other hand I believe, the policy estab-

Atkins^{Silver Steel} Saws

We specialize on *Manual Training Equipment*. A catalogue devoted exclusively to this line, will be sent free of charge, upon request.

If you are interested in tools, write to the nearest address below and we will put you in touch with our local agent.

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Largest Exclusive Manufacturer of
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Home office and factory Indianapolis, Ind. Address E. C. Atkins & Co.

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lished in this recommendation is an excellent one—to limit the different bodies of the association; but to be allowed more in case they can show it is necessary for an additional amount to be used.

It was moved and carried that the report of the Council be received and placed on file.

The President: When we called for the Exhibit Committee's report, the Chairman was not present. I am sure you all appreciated that a vast amount of work falls to the lot of this committee and that you all have been greatly pleased with their work. The most effective report has been seen in the hall outside, but we would like to hear from Miss Dorn.

REPORT OF EXHIBIT COMMITTEE.

Miss Dorn: I did not know there was to be a report. I have nothing but a few words in the way of a formal report. The rest will come to my successor. I have a ton of correspondence that will go to my successor—a library full of advice. As to the expense of the Exhibit Committee, there are no expenses attached to the work of that Committee other than postage that comes from the Association. The financial committee of the local force have taken care of the renting of the Auditorium, etc. Our total expense was \$9.60. I have only the exhibits in the large hall to offer as a report.

It was moved and seconded that the report of the committee be gratefully accepted and placed on file, which was unanimously carried.

REPORT OF THE EDITORIAL BOARD.

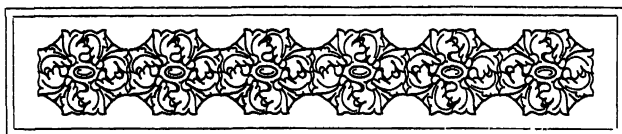
For the year ending May, 1914.

RECEIPTS.

From Miss Silke.....	\$ 29.23
Reports sold	49.65
Returned by postmaster.....	.24
From advertisements	833.80
	<hr/>
	\$912.92

EXPENDITURES.

Postage	\$ 18.00
Freight	1.50
Express	2.98
Telephone50
Post cards	2.25
Printing (Print Shop, Madison).....	16.25
Clerical Work (Martin \$30.40, Erdman \$1).....	31.40
Stenographic Work at Des Moines (Mrs. Kelley \$125, G. S. Elliott \$21.25)	146.25
Printing 1913 Report (Pantagraph Printing and Stationery Co.)	470.57
C. S. Van Deusen (Editorial Board Expense).....	10.00
Drayage—Madison (Jefferson Transfer).....	4.50
H. C. Sherman Co.....	7.00



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DOMESTIC SCIENCE CATALOGUE.
It is worthy of your attention, as much
as is our *Manual Training Red Book*,
which you all know.

Copy sent upon request free of charge.

ORR & LOCKETT
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14-16 West Randolph Street

CHICAGO

PROCEEDINGS

M. Emma Roberts (Editorial Board Expense).....	13.84	
Manual Arts Press (Exchange).....	22.50	
Mrs. Kelley's Expenses in Des Moines.....	33.00	780.54
		<hr/>
Balance		\$132.38

F. D. CRAWSHAW, Chairman,
CLINTON S. VAN DEUSEN,
M. EMMA ROBERTS.

Approved: R. C. WOOLMAN, Auditor.

The report was accepted and placed on file.

Following the acceptance of the report a motion was made similar to the ones made in previous years returning the actual balance to the Editorial Board. This brought out several amendments and re-opened discussion in regard to the finances of the Board. It was finally referred to the Council. At a meeting of the Council held after the business meeting the Editorial Board was directed to turn the funds on hand into the treasury of the Association and fifty dollars was appropriated to the Editorial Board to use as a working fund.

REPORT OF COMMITTEE ON PLACE OF MEETING.

To the President and Members, Western Drawing & Manual Training Association:—

Invitations for the meeting for the Western Drawing & Manual Training Association in 1915 were received from San Francisco, Buffalo, Kalamazoo, Toledo, and Chicago. Your Committee considered each invitation in the interest of the greatest number of the members. San Francisco was considered too far for the majority of the members in our territory, though there are those who will attend the Panama Exhibition, who cannot be at the W. D. & M. T. A. meeting in 1915 unless there is a minimum expense account.

Chicago being more centrally located than the other places extending invitations, is recommended for the place of meeting in 1915.

Respectfully submitted,

MRS. M. E. RILEY, Chairman,
R. C. WOOLMAN,
FLORENCE H. FITCH.

It was moved that the secretary be instructed to write a letter to the various cities having invited us to meet with them next year, expressing our appreciation. The motion was carried.

Mr. Abbott: If I may make a statement just at this point. When I left Grand Rapids I carried with me two invitations for the meeting of this Association in Grand Rapids, Mich., in 1916. We will be delighted to have you consider that a year from now, although possibly they will explain why we should go to Toledo.

First in



Quality

A NEW AMERICAN TOOL

The American Students' Precision Saw

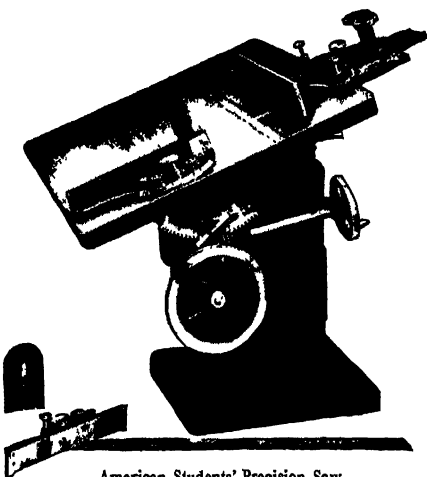
Will acquaint the boys with the **standards** recognized in the best manufacturing plants in the country.

Its adaptability to either ripping or cross-cutting without changing saws, enables the pupil to change from one kind of work to another without any loss of time.

The carefully constructed gauges are scaled for quick and accurate adjustment without the use of a rule or compass, familiarizing the pupil with the fine essentials of accuracy and efficiency in a tool of this kind.

You will have the satisfaction of knowing you have started your boys **RIGHT** if you teach them to work with **American Wood Working Machines**. We have just issued a descriptive folder with our **Students' Precision Saw** as the subject, wherein we dwell at length on its adaptability to school room practice. Let us send you a copy of it.

Our Manual Training School Catalog describes fully the latest and safest methods of equipping the Manual Training School. Let us send you a copy.



American Students' Precision Saw

American Wood Working Machinery Co.

Executive, Export and General Sales Office:

Rochester, N.Y.

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Portland, Oregon

REPORT OF COMMITTEE ON RESOLUTIONS.

Whereas, the twenty-first annual meeting of the Western Drawing and Manual Training Association has been one of the largest, most successful and most enjoyable in the history of the organization, and,

Whereas, these results depend upon the generous and untiring effort and the splendid hospitality of our hosts in Milwaukee,

Be it resolved, that we especially thank Miss Emily M. Dorn and Mr. Frank M. Bruce for their patient, unwearied efforts to provide so perfectly for our comfort and pleasure.

Resolved, that we extend our gratitude to our numerous co-workers who have contributed in large measures to the success of this meeting, and mention as representative of these, Miss Hale, Mr. Perry, Miss Blanchar, Miss Poole, Miss Gooch, Miss Babcock, Miss Sabin, Mr. Watson, Miss Eckers. That we thank Mr. G. W. Augustyn, president of the Board of Education and Supt. Potter for their hearty welcome and inspiring addresses.

Resolved, that we express our appreciation to the directors and the students of the Milwaukee Art Society, Milwaukee-Downer College and the Milwaukee Normal School for the preparation and presentation of the various pageants for our entertainment. That we especially mention the pleasure afforded us by the Wednesday evening entertainment directed by Mr. Dudley Crafts Watson and participated in by Milwaukee Normal Girls' Trade School Instructors, Special Teachers of Household Arts, Drawing and Manual Training, and Milwaukee-Downer College.

Resolved, that we express our appreciation of those interesting and attractive features of the entertainment provided by the pupils of the City Schools of Milwaukee.

Resolved, that we extend our thanks to the press of Milwaukee for liberal notices of our members and organization and for comprehensive reports of the proceedings, entertainments, etc., of our meeting.

Resolved, that we acknowledge with pleasure, the courtesies of the Milwaukee Art Society, the Layton Art Gallery, Milwaukee-Downer College, Milwaukee Normal School, the Boys' Trade School, the Trade School for Girls, and the Continuation Schools for the privilege of visiting them and enjoying their hospitality.

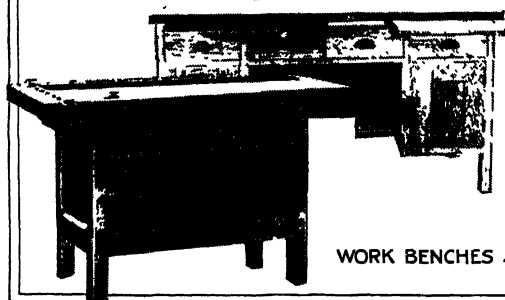
Resolved, that we express our sense of great loss and deep sorrow at the death of Miss Seegmiller and Dr. Woodward. The memory of these gifted members will ever be cherished by the organization to which they contributed so much of their lives and their inspiration.

M. EMMA ROBERTS, Chairman,
S. J. VAUGHN,
HAZEL HOBBS.

The report was accepted and placed on file.

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TABLES

WORK BENCHES AND VISES

OUR 1914 Supplement illustrates numerous new designs which have been added to our line of **Work Benches, Domestic Science Tables, Drawing Tables** and **Wood Turning Lathes**. Our latest models in drawing tables with **Individual Compartments for Drawing Boards and Instruments** attracted unusual attention at the 1914 convention, while the improved features on our domestic science tables including **Telescoping Swing Seats, Magnesium Enamel Tops with Polished Aluminum Binding** and new **Individual Double Burner Stoves** received universal commendation.

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with latest Supplement*

E. H. Sheldon & Co.

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ELECTION OF OFFICERS.

The Nominating Committee reported as follows:

REPORT OF NOMINATING COMMITTEE.

For President: Florence H. Fitch, Indianapolis.
For Vice-President: Ora A. Blanchar, Milwaukee.
For Treasurer: L. W. Wahlstrom, Chicago.
For Auditor: Vandelaïne Henkel, St. Louis.
For Member of Council: Robt. W. Selvidge, Nashville, Tenn.

IRA S. GRIFFITH, Chairman,
LILLIAN CUSHMAN,
WM. H. VOGEL.

A motion was moved and carried to accept the report of the committee and that the secretary be directed to cast the ballot of the Association for the officers named.

NEW BUSINESS.

Mr. Bennett: I wish to place before the organization a matter that I have been asked to speak of. It is an invitation that has come to this association to help in the work of the Panama Exposition. It is planned to hold a national meeting at San Francisco. The motion I would like to make is, that a committee of three persons be appointed by this organization to co-operate with any other committee of a similar nature which may be named by other organizations in the carrying forward of such a convention as has been suggested. The motion was seconded and unanimously carried.

Mr. Bennett: How shall this committee be appointed? I would like to suggest that the outgoing and incoming Presidents be two of this committee and another member.

Mr. Bennett was selected as the third member of this committee by a unanimous vote.

Mr. Wahlstrom: I wish to speak of printing in the schools. Since it is being introduced in so many of the school shops by wood working teachers who are experimenting and groping around for advice and help. I suggest that this association take a step and appoint a committee to first inquire into the status of the printing in the public schools and gather some data as to how far it has already been extended and also to formulate a tentative course of study by means of corresponding with people who have already had printing in the public schools and have been through the fire of failure or success. Do this by means of correspondence, within the next year. See what we can do in suggesting suitable equipment to meet the conditions of the different schools. I suggest that a committee of three to five members be appointed to take this matter up and one of the members of this committee be Mr. Reed of St. Louis, a new member this year but one who is enthusiastic in this field. He is acquainted with the matter of printing problems in the schools. I also suggest that the association provide a small sum for postage to carry on this work.

INDUSTRIAL-ARTS MAGAZINE

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WITH A NEW PURPOSE

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Milwaukee Wisconsin

It was moved and seconded that a committee of five be appointed to investigate printing in the public schools. It was unanimously carried.

The following committee was later appointed by the President: S. J. Vaughn, De Kalb, Ill.; W. E. Reeves, St. Louis, Mo.; Katherine M. Stillwell, Chicago, Ill.

Mr. Leavitt: Another new matter of business which should be taken up at this date is the contents of the telegram received from Mr. Hicks.

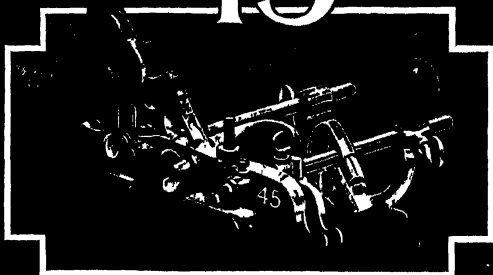
It was moved and carried that this be referred to the council for action.

It was moved and carried that a vote of thanks be made to the retiring officers for their untiring efforts during the past year.

The President: I wish to thank you and I am sure I express the sentiment of the persons who have been associated with me this year for the kindly co-operation given by the local committee and the people of Milwaukee. I wish to say, that whatever success has come to this meeting the claim is due to my associates in the organization and to them is due the thanks. I have always received the most hearty response from every request that I have made of any of the officers or committees connected with the Association. It has been a matter of great pleasure to me, particularly when my time was taken up with other matters—matters which I did not foresee at the time I was selected president of the association. I appreciate to the very fullest extent the help that has been given me in this association and to them I wish to extend the credit of whatever good we may have done or whatever success we may have had in this association.

Adjournment.

Stanley 45



SEVEN PLANES
IN ONE

Stanley Rule & Level Co.
NEW BRITAIN, CONN. U.S.A.

Constitution and By-Laws

Revised Form Adopted May 4, 1912.

ARTICLE I.—*Name.*

The name of this Association shall be the Western Drawing and Manual Training Association, and its object shall be the promotion of Art Education and Manual Training in schools and particularly in public schools.

ARTICLE II.—*Membership.*

All interested in education are eligible to membership in this Association.

ARTICLE III.—*Officers.*

Section 1. The officers of this Association shall consist of a President, Vice-President, Secretary, Treasurer, and Auditor.

Sec. 2. All officers, except the Secretary, shall be elected each year by a majority ballot of the Association. Nominations of officers shall be by a committee of three nominated from the floor and elected by ballot.

Sec. 3. The Secretary shall be appointed by the Council, as hereinafter provided.

ARTICLE IV.—*Meetings.*

The annual meeting shall be held at such time and place as may be determined by a vote of the Association, or, in case a meeting adjourns without time and place designated, the decision shall be left with the Council.

ARTICLE V.—*Quorum.*

A quorum for the transaction of business shall consist of twelve members.

ARTICLE VI.—*Committees.*

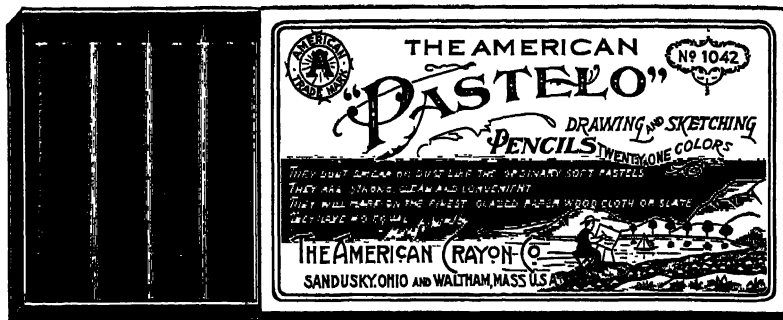
Section 1. The affairs of the Association shall be managed by a board of seven (7) Directors, chosen from among its members, which shall be called "The Council." The Council shall consist of five members, to be elected as hereinafter provided, and the President and Secretary, *ex-officio*.

At each annual business meeting of the Association one member of the Council shall be elected for a term of five years, upon the recommendation of the Committee on Nominations. The report of the Committee on Nominations shall specify the ground, in service to the Association, upon which such recommendation is based.

PASTELO

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21 Beautiful Colors for 10c



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GRAMMAR GRADE,
HIGH SCHOOL *and*
STUDIO USE

Write for Samples and Quotations

The American Crayon Co.
Sandusky, O. Waltham, Mass.

CONSTITUTION AND BY-LAWS

The Council shall hold one meeting immediately preceding, and one meeting immediately following, the Annual Convention of the Association, and such other meetings as may be deemed appropriate.

Four members of the council, of whom three shall be elected members, shall constitute a quorum for the transaction of business.

Section 2. There shall be a Program Committee of four members, consisting of the President, Vice-President, and two other members appointed each year by the President, one of whom shall be designated as Chairman, and one of whom shall be a resident of the city entertaining the convention.

Section 3. There shall be an Exhibit Committee of four members, with a term of service of two years, two members resident in the city which is to entertain the convention, to be appointed each year by the President, who shall also designate the Chairman.

Section 4. There shall be an Editorial Board of three members, with a term of service of three years, one member to be appointed each year by the President, the Chairman each year to be designated by the President.

ARTICLE VII.—*Amendments.*

Amendments to this Constitution may be made at any regular meeting by a two-thirds (2-3) vote of those present, provided notice of the proposed change shall have been given to each member at least three months previous to the meeting at which this vote is taken.

BY-LAWS.

ARTICLE I.—*Duties of Officers.*

Section 1. The President shall preside at all meetings and serve as an ex-officio member of the Council and of all other committees. It shall also be the duty of the President, with the concurrence of the Council, to make all appointments and fill all vacancies. He shall approve all bills before authorizing payments.

He shall keep in touch with the Local Committees in charge of the reception and entertainment of the Association at the place of meeting, and make such suggestions as he deems wise in regard to the management of the meeting, and in general direct the policy of the Association during his term of office.

Sec. 2. The Vice-President shall serve as ex-officio member of the Program Committee. In case of the absence of the President, the duties of that office shall devolve upon the Vice-President during the period of such absence.

Sec. 3. The Secretary shall keep complete and accurate minutes of all meetings of the Association, and upon their approval by the Council

"OLIVER" FORGE EQUIPMENT IN

TECHNICAL HIGH SCH.



DULUTH, MINNESOTA

Oliver Machinery Company : Grand Rapids : Michigan

shall enter the same in the Books of Record kept for the purpose. He shall keep the roster of members with addresses, enroll new members, correspond with persons eligible to membership or interested in the work and meetings of the Association, and as far as possible keep lists of the same.

The Secretary, under the supervision of Council, shall have charge of the books of account of the Association. He shall make and collect bills against members or others. He shall have charge of all bills against the Association, shall keep an account of the same, and shall present them in proper form to the Council, on demand, for audit. He shall transmit funds belonging to the Association to the Treasurer, accompanied by statements of sources from which derived, or purposes to which to be credited or both.

It shall also be the duty of the Secretary:

To send out all notices, announcements and bulletins as directed by the Council.

To provide duplicate copies of minutes, membership lists, address committee reports, etc., for the use of the President and Chairmen of Committees as desired.

To provide a thorough and efficient system of registration, including name, title, and permanent and local addresses of those in attendance at the annual meetings.

To attend to the printing and distribution of all necessary stationery as directed by the Council.

To keep a full and accurate record of all work performed in the discharge of his duties, together with an itemized account of expenses and upon the approval of the Council, submit the same to the Association at its annual meeting.

To act as custodian of all papers and properties belonging to the Association, and keep a list of the same for incorporation in the Annual Report.

The necessary expenses of the Secretary incurred in attending the annual meeting shall be paid out of the funds of the Association upon warrant properly drawn on the Treasurer and approved by the Council.

Section 4. The Treasurer shall be the custodian of all moneys belonging to the Association, transmitted to him by the Secretary, and shall deposit the same in a bank or banks approved by the Council. He shall pay bills upon warrants drawn by the Secretary and approved by the President. He shall keep an accurate record of receipts and disbursements and shall furnish statement of same to the Council from time to time required. An itemized report of receipts and expenditures with vouchers shall be submitted to the Auditor and afterward to the Council for approval, before being presented to the Association.



ONE OF THE MOST ATTRACTIVE EXHIBITS AT THE
WESTERN CONVENTION HELD IN MILWAUKEE
MAY 6, 7, 8, 9, WAS THAT ON

Johnson's Artistic Wood Finishes

Perhaps the most interesting feature of the JOHNSON exhibit was the demonstration of *Johnson's Wood Dye for staining reed baskets*.

Manual Training Instructors who are not familiar with this line of wood finishes can secure complete information, samples, finished wood panels, etc., by addressing the firm as follows:

S. C. Johnson & Son "The Wood Finishing Authorities" **Racine, Wis.**

CONSTITUTION AND BY-LAWS

Section 5. The Auditor shall examine the Annual Report as well as the books and vouchers of the Secretary, the Treasurer, and the Chairman of the Editorial Board, before the annual meeting of the Association and report upon the same to the Council.

ARTICLE II.—*Standing Committees.*

Section 1. All bills incurred by any committee for expenses shall be approved by the Chairman of that Committee before being submitted to the President for approval.

Section 2. The Council shall receive and consider all appointments, resignations, the Secretary's minutes and reports of Committees before authorizing their presentation to the Association.

The Council shall at its first meeting after adjournment of the annual convention, elect a chairman, and appoint an active member to serve as Secretary of the Association and of the Council for one year, or until his successor is elected. The Council may, for cause, declare the office of Secretary vacant, and make a new appointment at any time.

It shall consider all bills for clerical or other expenses before authorizing their payment.

It shall furnish to the Secretary immediately after the annual meeting, the list of officers and committees for the year and such statements as to the work of the year as it deems desirable for incorporation in an official bulletin to be mailed to each member as soon thereafter as practicable.

It shall authorize the issuing of all bulletins, announcements, etc., relating to the general work of the Association and its annual meeting, and, in general, exercise such supervision over its affairs as may be necessary to insure satisfactory results.

It shall keep a record of its proceedings, including expenses incurred in the discharge of its duties, and report the same to the Association at its annual meeting, together with such suggestions and recommendations as may seem desirable.

It shall prepare, for presentation at the annual business meeting, a report of the financial condition of the Association for the past year, and shall also present therewith a detailed estimate of the probable income and expenditures for the following twelve months.

It shall determine, for the guidance of the standing or other committees, when not otherwise provided by specific appropriation by the Association, the sums of money to be available for the work of such committees.

It may authorize the keeping of a separate account of the finances of the Editorial Board.

A DRAWING TEACHER was once asked why she preferred to have her pupils use DIXON'S COLORED CRAYONS. "Because" she said, "I am just selfish enough to know that in a measure the work my pupils turn out decides with the board my ability as a drawing teacher." This young woman knew when to be selfish—she became so after we had sent her a copy of "*Colored Crayons in Your School.*"

Yes, a postal will do. Write it now.

JOSEPH DIXON CRUCIBLE COMPANY
JERSEY CITY, N. J.

CONSTITUTION AND BY-LAWS

Section 3. The Program Committee shall engage lecturers and speakers, and have entire charge of the program for the annual meeting. In consultation with the Council, and the Local Committee of the city where the meeting is to be held it may make such arrangements for service, entertainment, and publicity as it deems necessary for the success of the meeting.

At least one day previous to the annual business session the Program Committee shall report to the Treasurer all bills of expense connected with the current meeting.

Section 4. The Committee on Exhibits shall, at the beginning of the school year, invite representatives of schools or school systems to send exhibits of art, manual training, and other forms of industrial work. It shall furnish to those intending to exhibit all necessary directions for arranging, mounting, marking, shipping, etc.

It shall make such arrangements with the Local Exhibit Committee at the place of meeting as will insure the satisfactory placing of the exhibits.

Section 5. The Editorial Board shall have full charge of the publication of the Annual Reports, collect and collate the manuscripts of lecturers and speakers, reports of discussions and minutes of the annual meetings, and attend to such editing of the same as may seem necessary. In consultation with the Council, the Editorial Board shall be empowered to make from time to time such changes in the general form and character of the Report as may add to its attractiveness and help to make it valuable to members and others interested in the work of the Association.

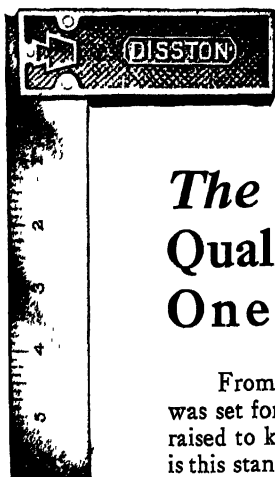
It shall also attend to the mailing of these Reports in accordance with lists furnished by the Secretary, and to the sale or distribution of extra copies from time to time.

It shall keep a full and accurate account of all receipts and expenditures and other items of interest in connection with the work of the Board, and report the same to the Council before presenting to the Association.

ARTICLE III.—*Membership and Dues.*

Section 1. There shall be an annual membership fee of two dollars (\$2.00) payable to the Secretary at the annual meeting. Payment of dues shall entitle each member to a copy of the Annual Report, the right to vote on all questions before the Association, and such other privileges as belong to active membership. Non-payment of dues for two successive years shall be considered equivalent to resignation.

Section 2. All necessary local expenses, including those involved in the housing, placing, and reshipping of exhibits, in engaging halls for meetings and necessary service, etc., shall be guaranteed by the city or organization inviting the Association for its annual meeting.



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CONSTITUTION AND BY-LAWS

ARTICLE IV.—*Resolutions and Appropriations.*

Section 1. No resolution may be brought before the Association for final action, if any member objects, until it has been referred to the Committee on Resolutions, which shall report on all resolutions received by committee for recommendation.

Section 2. No motion involving appropriation of funds from the treasury may be brought before the Association for final action until it has been referred to the Council for recommendation.

V.—*Clerical Expense.*

Necessary clerical expenses incurred by the officers and the Chairmen of the various committees in the discharge of their duties may upon approval of the President and the Council be paid out of the funds of the Association.

ARTICLE VI.—*Order of Business.*

The order of business at the annual meeting shall be as follows:

1. Election of Committee on Nominations.
2. Appointment of Committees on Resolutions and Place of Meeting.
3. Business meeting.
4. Reports of Secretary, Treasurer, and Auditor.
5. Reports of Program Committee, Exhibit Committee, Editorial Board, Council.
6. Reports of special committees.
7. Election of Officers.
8. New business.
9. Unfinished business.
10. Adjournment.

ARTICLE VII.—*Amendments.*

The By-Laws may be amended at any regular meeting by a two-thirds (2-3) vote, provided notice has been given at a previous meeting of the current session, or without previous notice, by a unanimous vote of the members present.

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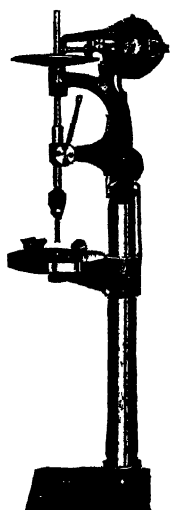
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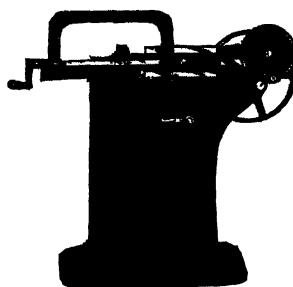
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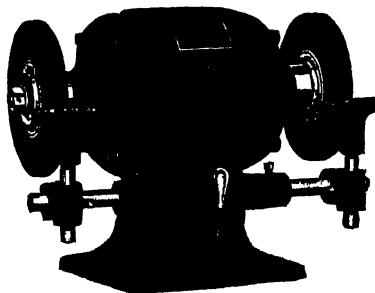


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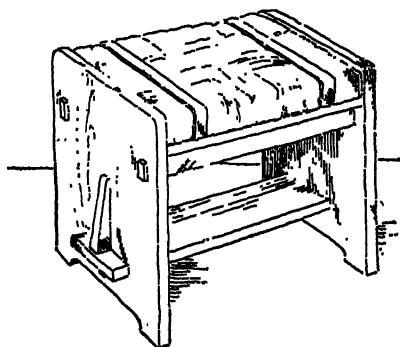
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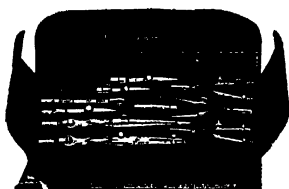
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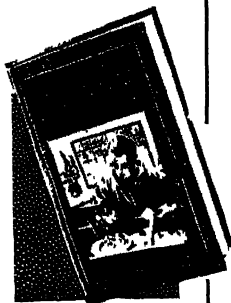


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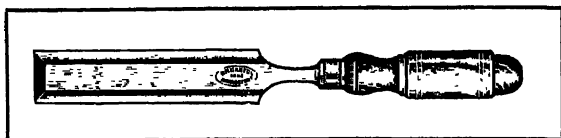
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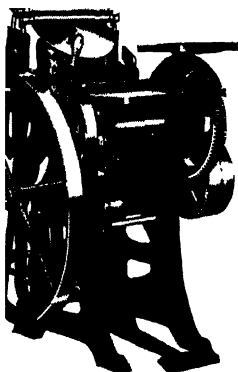
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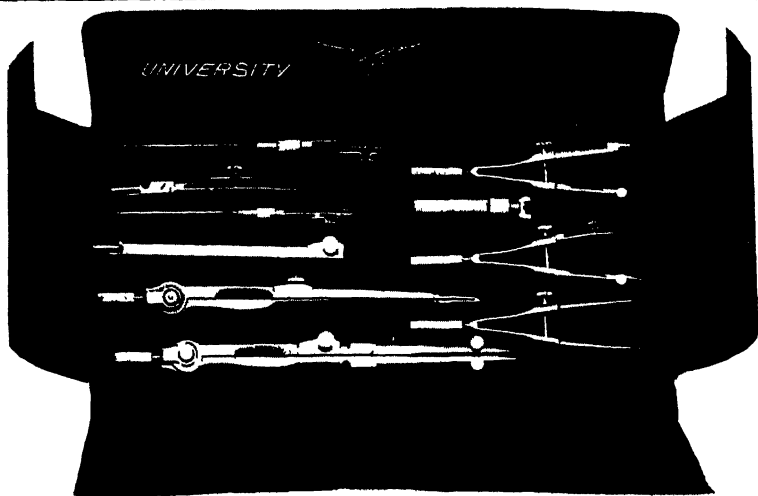
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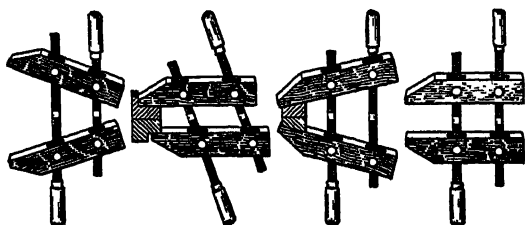
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